

United States
Circuit Court of Appeals
For the Ninth Circuit. ²

NORTHERN PACIFIC RAILWAY COMPANY,
a Corporation,

Appellant.

vs.

OLIVIA WAGNER, as Administratrix with the
Will Annexed of the Estate of Nick Wagner,
Deceased,

Appellee.

Transcript of Record

In Two Volumes

VOLUME II

Pages 433 to 880

Upon Appeal from the District Court of the
United States for the District of Montana.

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(Testimony of Tom Rush.)

baux. I don't think I have looked at this relief map here—this model. Perhaps I wouldn't know much about it if I did look at it. Mr. Massey is living on the place now—the place where I lived when I lived close to Wibaux. I commenced to live there at what you have been calling here the “Massey Ranch”, in 1884, and moved away from there the 24th,—1919—on the 24th, which I think would be about 40 years; roughly speaking, I lived there about 40 years. I am getting a little bit old now; the 10th of June I will be 79. When I lived at what we call now the Massey place, I had a cow barn there—one barn, we used to call it the “dugout”; it was dug in the side of the bank; we used to like to use it for a winter barn in extra cold weather. The “winter cow barn” would [337] be in a southwest course from the house.

Mr. MAURY: Witness pointing in northwest course.

Mr. HALL: Oh, no.

A. I haven't got any barn north—northwest of that house at all.

Q. Now, this is supposed to be the town of Wibaux.

A. Fine looking town,—the railroad track right along there. It is pretty plain now when you explained where the depot, the stockyards, the elevator and the city water tank are. I see the Davis Addition; (I used to cut hay in the early days in the Davis Addition;) and this is supposed to repre-

(Testimony of Tom Rush.)

sent my ranch. That small model looks something like my house. There was all the way from two to three acres in that patch. This white mark over here on the bank of the creek—that don't represent the cow barn does it? Yes, sir, that would be the way the creek would run down by that winter cow barn. (Witness standing so he could look towards the town from house). Is this the house? And this the creek along here?

Q. No, here is the road running here—this brown or burnt sienna is the road; the blue line is the creek. * * Now, you are south of the house. The scale of this map, Mr. Rush, is, one inch on the map equals 50 feet, so that when you stand here, you are 1000 feet south from your house; you are 1000 feet approximately between the edge of this map and your house. * The blue line is the creek. Now, would this white mark here be about the cow barn that you have spoken of, in the bank? —

A. I will have to look at that a while.

Q. Mr. Hall calls my attention that there has been evidence here that the creek used to flow in closer to the bank here.

A. Yes; that barn you speak of; this is the creek; that barn ought to be on this side here; well, it ought to be on the side next to the house; that would be it there. I have had more than one cow barn there—at the same location. I had what we call that underground barn, and I had another one up here on top. [338]

(Testimony of Tom Rush.)

Q. I am speaking of the winter cow barn in the embankment. You never had but one of those Mr. Rush?

A. I had one up on high ground here you know.

Q. Could you give us any idea when you built this winter cow barn up on the bank, and about when you left the place and turned it over to Massey—the one that was there then?

A. I would judge I built that there when I lived there about half of that time.

Q. (You may get up on the stand.) Now, Mr. Rush, during the years when you had been living at what we have been calling here the Massey place, did you have any trouble with high water getting up out of the creek and getting up around that winter cow barn?

A. No, sir, we did not. * * Water never got up in that cow barn and water never got up around my house—never. As to whether water ever got between my house and the road that ran in front of my house, east of my house, that ran up to the main road that went to town, will say it was always perfectly dry; there was a two or three-acre patch.

Cross Examination:

(By Mr. Maury):

Q. Mr. Rush, there was a two or three-acre patch there that never was covered with water wasn't there?

A. Well, this little patch up around the house was never covered with water; there never was any

(Testimony of Tom Rush.)

water on there to bother anybody—on that little patch there, you know. The creek ran pretty close to that little patch.

Often I have seen the Beaver Creek rise. In the spring of the year when the ice was going out, it would be natural for the water to raise a little on each side of the creek—that would be about all. It got out of the banks onto the low ground here. I think it was in 1921; it covered that low ground; it wasn't very deep; in the west course there it ran from possibly three feet to five or six feet on this low ground.

As to the width of the water in 1921 on that low ground, between [339] my house there and Wibaux, —oh I was talking about this where I said it was from three to six feet deep, that would be west of my house. There was some water on the low ground north of my house in 1921. The width of that on the low ground north of the house, well you would go possibly five or six rod in a northwest course and you would get to the corner of this little three-acre patch that we talked about, and when the creek would raise from four to five feet, a little of that water would run down to the edge of this three-acre patch and formed a small stream. That water would run along there three feet deep and five or six feet wide, but if that would run today, tomorrow you would be liable not to have any stream at all there; that would be the way it would work.

(Testimony of Tom Rush.)

It very seldom came up there during the days I was there; it was higher on that other side of the creek and lower on this side—on the left hand side it was higher, and when the creek would raise five or six feet, this bank would naturally throw the water over this way onto the low ground. As to how often I have seen the water up on that low ground in my whole life—well, that would come when this creek would raise a little bit and it never did any damage when it come on that low ground—we never thought much of that. I used to like to have that come; I used to irrigate my potato patch with that stream. The stream wouldn't come up every year and irrigate the potato patch; that was just once in a while; I wouldn't plant potatoes there every year. As to the width of this water all across the flat—well, in a northwest course that was pretty low ground; I suppose it would be safe to say that that would be very close to a quarter of a mile. This high bank on the left hand side of the creek threw this water over here on this east side; that was any year you might say, but in 1921 we had more water there than I had ever seen you know. It wouldn't get a quarter of a mile wide there most every year. Other years there it might run out from the creek [340] possibly two or three rods, something like that, but it would take an extra big rain, something like 1921, to throw this water the quarter of a mile. I remember the road running down here east of my house. That stream that I was speaking of going close to the two or three-

(Testimony of Tom Rush.)

acre patch, did not run around close to the road. That was one place it ran within three rods of the road. As to where that was,—here is the three-acre patch; it never did get under water; well, this water that we speak of ran along here and it came down here—this would be the little creek that I speak of, and that would come along here and take a bend over here and take it within two or three rod of the main-traveled road—if that is it. Is that my road? Yes, that is the road; this is north up that way.

Mr. HALL: You came from town and you drove down this road and you turned to the right, and the creek comes down from the south and turns to the left there.

I wanted to get to the northwest corner of where that is you are figuring there. That is right about here I should say—right by the corral down there; you might say I didn't have any corral; I used to use the stockyards. Where do we strike this little three-acre patch? Here it is—that was never under water.

Q. Looking from the three-acre patch towards the southwest——

A. I mean northwest.

Q. I mean southwest. Now, Mr. Rush, looking from the bank here on your three-acre patch towards the southwest, how often have you seen the water there get 600 feet wide?

A. Oh, you are “crazy” now; don't talk like

(Testimony of Tom Rush.)

that,—oh, wide? I thought you meant high; oh, I thought you were crazy——

The COURT: I think we will terminate this conversation here.

(Recess until 1:30 P. M.)

I don't know "very much" about 600 feet wide right across from my house there; we never bothered with that other kind of work [341] at all; my work was with cattle. Right straight west of the house I have seen the water pretty near that wide, that is half of a quarter of a mile—600 feet would be about half of a quarter of a mile? But I haven't seen it very often. I don't think I can say I saw it like that more than twice in all those years—I couldn't say what years; I didn't keep track of all that kind of work you know; one was in 1921; I couldn't quite say when the other was—it was not quite so wide. I couldn't say how long it was before that; I never kept track of that.

This morning I spoke of water being backed up by ice. I didn't see that the ice got caught anywhere; there was ice on each side of the stream as it was melting you know, and the main creek breaking up; I couldn't say that the ice was stopped anywhere in particular.

For a number of years I always got my own coal right near the house.

Mr. MAURY: Come over here Mr. Rush.

I tell you, your "blackboard" there gets me rattled; it is a fine way to get me rattled monkeying with that "blackboard". Here was my house. It wasn't very far southeast of my house where

(Testimony of Tom Rush.)

the coal was mined in the creek bed. They didn't mine coal there for 40 years; it might be safe to say I used to get some there for my own use for possibly half of that time—20 years. I didn't allow other people to mine there so very much, because I thought there was enough there for "this boy" himself. If you bring a load of coal home for your own use, you know you wouldn't call that "mining". We went under the surface quite a little ways; the surface fell in finally, but not worth speaking about. As to whether the ground was lower at the end of my mine than it was before, will say that the water used to work it down a little bit lower. [342]

Redirect Examination:

The main traveled road going to Wibaux, is just east of my house a little ways. During all the years that I lived at that place,—whether water ever got up between my house and the road, will say that I could never get enough water on that three-acre patch to honestly wash my face—that is, a good washing—all those 30 or 40 years.

After the 1929 flood I went in to Wibaux, I would judge it would be from three to four days after the flood, and when I came to Wibaux I came a little ways north of Mr.—that man you had here—Burke?—a little ways north of Mr. Burke's; we went probably a half a mile west. We did go down north a half a mile and then a half a mile west. When I came in to Wibaux after the 1929 flood I

(Testimony of Tom Rush.)

came past Jim Linn's place and came down past Burke's place. On the way in to town, I saw evidence, or high-water marks, or things to indicate that there had been a flood; the country seemed like it was "struck with lightning" or something else; there seemed to be marks out on the west side of the road possibly half a mile in places, and big posts and fence and wire all scattered through the country—it was pretty bad.

Q. During all those years you lived there, had you seen anything like that before?

Mr. MAURY: We object. This witness wasn't in that country; he was postmaster in Wibaux. This is taking too much time.

The COURT: Lay the foundation Mr. McCarthy.

When I was ranching south of Wibaux I had on my ranch cattle and horses. During those years I had occasion to go to the south of where I lived; I had lots of business, and I had horses south and southwest of town, and I had cattle running north and northwest of town. My work was on each side of the track. I had been up in the direction of where Burke lived and where Linn lived, during [343] the years I lived there, and before either one of them commenced to live there, I commenced to go up that way. As to how often I went up there,—one summer I kept cattle southeast of Mr. Linn's; there wasn't no fence—the country wasn't fenced at all, and there was lots of feed there and they was along on the creek.

(Mrs.) MARY EDIGHOFFER,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

My name is Mary Edighoffer. I live at Wibaux; have lived right in Wibaux since 1919. In June, 1929, I was living in Wibaux in the very south edge of town—south side of town. I was living in the south side of town in 1921, but not the same place—or same location. That is what has been called here the Davis Addition.

In 1921 I observed high water in the Davis Addition, referring now particularly to June, 1921—June 17, 1921. Telling the court and jury what I observed on that date with reference to high water in Wibaux and particularly in the Davis Addition, will say that it rained—hailed first and then rained pretty hard—and of course, the water come up pretty high from what they call the Possum Hollow, I think, down through Ira Parks' and in right back of Tom Sletten's house; then it came from the east and down along the railroad track right in north of the railroad there. It came down that draw north, a ways. When I speak of the track, I mean the main track. The direction, generally speaking, that that water was moving,—well, it struck the creek, of course, and it went north. I did not see any water backed up there from the railroad bridge. On that afternoon of June 17,

(Testimony of (Mrs.) Mary Edighoffer.)

1921, I was down town until after the rain quit and the water went down a little. I run the laundry down there for William Phon. When I [344] went home, the direction I took, I went out east and across the bridge and then across the foot bridge home. That would be the county bridge—then along that foot path. When I got to the Davis Addition there was some water in the Davis Addition. As to how deep it was—oh, it wasn't very much around just puddles around there; there was some on that cinder walk—it washed out some of the cinders you know, and there was some in there. I did not at any time there on June 17th, see any water in the Davis Addition other than that coming down from Possum Hollow or off of the east hills.

I was at home on the night of June 6th and the morning of June 7th, 1929. As to what I observed in the way of a storm and the high water on the night of June 6th and the morning and day of June 7th,—I don't think I slept very much at all; I kept dozing off and I was waking up and it was raining every time I wakened up. I had my head to the west window and I raised up the curtain when lightning come, to see how much water was getting around there. There was water getting around there—I should say there was—a good deal of it, but it kind of run down you know, from the time it was good and daylight, and I said everything is spoiled anyhow and I won't get up until it got day-

(Testimony of (Mrs.) Mary Edighoffer.)

light. At daylight I got up. After I got up, I went outside and let the hens out that was setting on—that had little chickens, and the chickens. I got the fire built. I heard so much noise. First, I noticed Sletten's horses up on the hill south of there; they acted like they were afraid of something; they would come up and they snorted and were looking back south, and you could hear noises—different sounds. The horses would whinny and cattle would be mooing, and you could hear a rumbling noise like water running in it and something of the kind like cracking and snapping once in a while.

I went down towards the creek. I went down that cinder walk [345] on that foot bridge and pretty near to the county bridge and I could see the water acoming; I saw the water acoming from the south. Describing to the court and jury what I saw there in the way of water, well, there was one—I don't know what they call it—wall of water or wave of water—I don't know what they call it—but it looked like it was two or three foot deep, rolling down, you know. That water two or three feet deep, was rolling along across from Massey's north field. When I went down to the creek, there was some of the neighbors digging and letting water out of their garden; they wanted to know where I was going. I says, "I want to see what happened here; I believe we are going to have a flood here," and then there was quite a few of them come down there too. That roll or wall of water came down

(Testimony of (Mrs.) Mary Edighoffer.)

and it put the creek out of its banks—put the creek out of its banks all along, as far as I could see, and there was lots of trash along with it, trees and boards and stuff like that. These trees and boards and trash lodged against that county bridge and foot bridge.

Q. What effect did that lodging of trees have on the county bridge?

A. There was another high roll of water came down,—I don't know how high it was, but it looked six feet deep or more, and it came down rolling and carrying everything with it as it went. It seemed to be carrying with it all kinds of small buildings like chicken coops and outbuildings that way, and some pigs, chickens and calves, and one horse that I saw. That wave or roll of water went right north as much as it could, but it widened out there where it got flatter, but back of Sletten's and Ostby's place, the bank must be 20 foot anyhow, and when it got past that bank, why of course, it let it widen out.

I know where the green house is that Mrs. Miller used to live in, and I know where the city water tank is. I saw water over in that part of town. As to what I saw there in the way of [346] water,—well, this high wall of water that came down cut right straight across there, you know, and there was the Mozier house, they call it,—the yellow house—and when it struck the house, (it was pretty close to the banks of the creek; it was closer than it is now, because it has been moved back, since the

(Testimony of (Mrs.) Mary Edighoffer.)

flood), and it kind of give a couple or three times and it kind of popped right up and went off like a cork; the water—the house too, was gone. The house was right close to the bed of the creek. It was west of the city water tank, kind of southwest like—a little bit south and west, because it was right close to the bank of the creek. That yellow house went down in by Orgain's house.

This water that I saw carrying these various articles that I have described—small buildings—I said that they lodged against the county bridge. As to the effect that the lodging of those buildings had on the county bridge, of course it would stop the opening in the county bridge. The water went over the top of the foot bridge and over the top of everything, over the cinder walk and over all that,—of course, when it came across there, it came right over Sletten's—it came right over Sletten's back yard and Ostby's too, because it came straight up through from Rush's field and when it got there, it was flatter—it gave it a chance to spread out. Rush's field and Massey's field is the same thing. Of course, when I first come there it was Rush's and it was changed to Massey's. Well, that water took that green—well, they call it a garage,—Drake did; it was quite a good-sized green building; they had a barn, garage, feed and something like that; it was very near down to the bank of the creek, south of Mattie Miller's—there was a building south of the green house. When this high wave of water struck

(Testimony of (Mrs.) Mary Edighoffer.)

that building, it knocked it off the foundation and it come down into the creek and when it struck the county bridge, it seemed like it turned up this way and when it struck that bridge, it raised right up over that bridge [347] that way and crashed, and that pretty near stopped all the county bridge—stopped anything going through it. And all this time there was other stuff coming and filling it full.

Q. Did you stay and watch it?

A. I didn't stay there very long after that. I stayed until the Methodist parsonage got about half way from Charlie Dahl's blacksmith shop down to the bridge. You see, it came straight down. There used to be a street where that old engine stands,—until it struck the creek; and then it turned and went north to the bridge and about the time it got half way to the bridge, there was too much water for to stick around there. I did not notice anything with reference to the railroad bridge at that time. When the Methodist parsonage started to come and the county bridge was blocked, I started to get out of there—I had to. I went home. There was lots of people around there and of course they all had to get out of there. Some of the people were,—Roxey Trollope, her name is Hines now, she was right close; Trollope and Frisinger, and I don't know who else; and I think Tom Sletten was there, and Mrs. Sletten. I went home and there was a lot of them went that far with me, because I was out far enough south, so there wasn't no water around there then you see; of course, none of us had breakfast—

(Testimony of (Mrs.) Mary Edighoffer.)

I don't think anybody had. So I asked them to come in there and have some coffee and a lunch with me. So, we hunted up dry stockings and dry socks for some of them and we had some breakfast and there was quite a few eat breakfast there,—I don't remember how many because there was different ones coming in and going out, besides the ones that stayed for breakfast. As to whether I remember in the city of Wibaux, of someone having some grading machinery in there at the time of the flood, there was an old grader of Johnnie Jones' that stood there since I can remember—I don't remember how many years, it stood there right to the north end of my garden. I don't know those streets by [348] name over there. As to what happened to the grader, well my garden fence went and it wrapped right around it and it tipped the grader right to the north. The grader was made out of solid iron and steel. I wasn't down there to see what did happen to the county bridge that day; I know, but I didn't see what happened. Later on, I saw it. It was sitting on the west bank of the creek about half way down to the depot, after the flood. I saw the Methodist parsonage after the flood; that was sitting up on the side of the railroad embankment.

Cross Examination:

(By Mr. Maury).

Q. Mrs. Edighoffer, you were at a trial of one of these cases over at Baker?

A. Yes, sir.

Q. You heard Ed. Trollope say that a tree float-

(Testimony of (Mrs.) Mary Edighoffer.)

ing down knocked that grader over, didn't you?

Mr. McCARTHY: Objected to as not proper cross examination.

The COURT: That might go to test her recollection as to what happened.

A. Well, it needn't to be the tree that knocked it over, and I don't know as it was. This grader was sunk down into the ground probably a foot deep or maybe more, sitting there for year after year, and the dirt every year from rains and so on, would naturally catch on there and bury the wheels down quite a bit. Some object that day, turned it over; it was turned over, of course, by things hitting against it. I said that it was turned over by my fence,—well, all the stuff was against it, but my fence caught around it. This corner post stood solid and it was five wires on the fence and when the fence went out, it hit against the grader and it made it that much more would catch it. The evening before June 7th, it didn't rain any to amount to anything, that I remember of, until about 9:00 o'clock at night; it was [349] after I went to bed. It rained pretty hard then by streaks. I don't know as I was nervous during the night about high water, but the rain kept waking me up. When I first got up in the morning, the water in Beaver Creek right opposite from my house, it was quite a ways from my house to the creek; I couldn't tell you how high it was then. I can't tell you exactly how soon I got down to the creek, because I got a fire made and got water and attended to the chickens and geese and stuff

(Testimony of (Mrs.) Mary Edighoffer.)

I had, so I don't know. I lived close to John Bailey; I think he was living over on the hill—he moved back and forth so much, during the spring, I don't whether he was up there or not. I don't remember whether I saw him going to work that morning or not; I might have, but right now I don't remember. I don't know what time he usually went to work; he went to work different times. As to how the creek looked when I first saw it that morning of June 7th, well, the water had run off from all around there; there was a lot of water in the night; when lightning would flash, you could see water was clear across the road from my house.

Q. Now explain where your house is Mrs. Edighoffer. Come here and show us on the plat where your house was then? * * Where do you think it was?

A. Somewhere in the second block from Sletten's on this side here. (That is east) * Here is the Ponke house, and coming down here. * It must be there. * I believe that is it. I won't swear to it,—* east side of Beaver Street.

Q. It is the east side of Beaver Street and south of this thing marked Lincoln Avenue. * There is the Edighoffer house (pointing).

Telling what I did around my house that morning after I got up, I looked after my chickens and poultry, and chicken coops; some hens had eggs and some had little chickens, and some had little ducks and some had geese. I didn't get breakfast for a while; I haven't any idea when I got it. I went

(Testimony of (Mrs.) Mary Edighoffer.)

down from there towards the creek. The creek when I got there, wasn't out of the [350] banks much, only in low places spreading out a little; it wasn't out of the banks much. It was out of the banks down there by the kind of a green house—Mattie Miller's house you call it; it was running out a little bit, but not much. When I first got there, it wasn't touching the Mattie Miller house—nowheres near it then; it was just out of the banks, that is all, but nowheres near the Mattie Miller house. I couldn't tell you what time those trees came around here and went to the county bridge, but it wasn't very long after I got there. The grader hadn't turned over when I first got there—I should say not; I don't know what time that turned over. Nobody has told me to say, when I am asked about times that things happened, to say "I don't know"; nobody don't have to tell me——. I don't know. I said the water got up around Ostby's house. As to when it got up around Ostby's house, when that high roll of water come down the creek. There was a little roll of water—small roll of water, maybe two or three foot high at first, and that put the creek out of its banks. I wouldn't attempt to say what time in the morning that happened because everybody was working and running here and there and I don't know what time it was—people wouldn't think about the time; people was excited—I should say they was. When I first got out, there wasn't anybody looking at the stream—until I went down the street and told them,—them that was outside I told them there was going

(Testimony of (Mrs.) Mary Edighoffer.)

to be a flood, and I went down to the creek to see if I could see anything. As to whether the first debris, trash and everything all went to the county bridge or not,—well, there was an awful lot of it stopped there and it couldn't help it; there was so many planks,—and trees uprooted and different kinds of machinery; and pigs and calves, and there was one horse came down before this green house, or Mozier's house went out; that big roll of water "fixed" the whole thing. It wasn't very long after this debris, pigs, trash and things stopped at the county bridge before that [351] second wave that I described, I haven't any idea how long, because everybody was talking and everybody looking and running this way and that. Tom Sletten was down there at that time—when that second wave came,—his wife, and he got in his car and took his wife out of there. I think he was there when the first wave came.

I know Edith Jones. She was there pretty shortly after.

Q. How long before or after?

A. How long before I don't know; I know she was around there after. When I first saw Edith Jones that day she was riding a horse.

That wave that came across and struck by Ostby's house looked to me like six foot deep. That was after the first wave that lodged everything at the bridge—not everything, but it lodged quite a good deal at the bridge. I don't know whether it was one hour afterwards, or half an hour, I don't know;

(Testimony of (Mrs.) Mary Edighoffer.)

I wouldn't say the exact time of no time, because I have no way of knowing.

Q. Did the water look like that Mrs. Edighoffer? Now, this is from the Davis Addition——

Mr. McCARTHY: At what time Mr. Maury?

A. Well, there was water everywhere.

Mr. McCARTHY: May I ask what the witness is being shown? What are you showing the witness?

Q. I want the witness to tell me what it is.

Mr. HALL: Counsel is now showing the witness a photograph——

Mr. MAURY: We object to coaching the witness against our cross-examination——

The COURT: Quiet down; what is the matter with you?

A. I can't recognize what is on there.

What water came into my place where I lived on June 17, 1921, come down that Possum Hollow.

Q. Your place across town—you had a laundry did you not?

A. Not in 1929. [352]

Q. I said in 1921.

A. I understood in 1929.

Q. In 1921 where did it come from?

A. It come down Possum Hollow and that other draw north of the railroad.

Q. And your other place was right back of the First National Bank in Wibaux in 1921, wasn't it?

A. It is the very last building next to the county bridge there, right beside Ole Helvig's harness shop. That water in 1921 that got in there come down

(Testimony of (Mrs.) Mary Edighoffer.)

from Possum Hollow and north of the railroad track. Water from north of the railroad track did not get into my place of business in 1921. Water that came across the creek did get into my place of business in 1921. As to the depth that it got into my place of business in June, 1921,—13 years ago,—there was very little that got in there; if Louie Phon hadn't opened the trap door—he had chickens in there and he was afraid they was going to drown, and when he raised the door up, the water come in and spread over and it didn't amount to anything. That was from the creek, and it come down Possum Hollow.

As to how far south of Ostby's house that second wave struck, well it spread out as soon as it got there where Clarence Chase used to live south of the creek; it rolled down there south of the creek, south of where the creek bends there to Sletten's—the bend by Ostby's house and Sletten's there; the wave came and got right out by the bend here—went over right by Ostby's house—went over that steep bank there. I do not know what time of day that was; I had no thought of looking what time of day it was; I had something else to think about then. Ostbys was there when that wave came over and Slettens was there when that wave came over. That wave must have been more than three times as high anyhow, as the first wave I saw. That wave did not come from towards the water tower across; it came across Massey's pasture. That is Massey's pasture that you are pointing to there. As to whether it came through those houses you are pointing to there, will say [353] that it came right

(Testimony of (Mrs.) Mary Edighoffer.)

through Pete Cramer's house, if you know where that is. You might be pointing to Mrs. Cramer's yard. Mrs. Cramer might be there that day; I am not sure either. Ostbys lives east of Cramers. I know who lives east of Cramers, but I didn't then. As to whether that wave came by where I live now and struck towards Ostby's and Sletten's houses, will say it didn't go quite to them houses there, but it spread out there; it cut right square over that high bank by Ostby's and Sletten's—that high bank that you are pointing to. Giving you some estimate as to how long that wave was, it was clear over from towards Pat Coyne's—well, from over that direction; I couldn't see exactly how far. Pat Coyne's is across the river from Massey's.

Q. And it came from Pat Coyne's direction straight away towards Ostby's?

A. It came up there so that it spread out from Pat Coyne's—not to Pat Coyne's, but up that draw towards Pat's; it spread out that way towards Pat Coyne's. It was moving to the north, but it spread out towards Pat Coyne's, some; that is, it was widened out that way where the bank was low—here the banks was shallower, of course, it gave it more room to spread out. I don't know how high that wave was where the banks were narrow. When I looked across there, it was clear across as far as I could see; it was that high wave coming down. As to whether I noticed that wave going across towards the water tower, will say I noticed it when it struck that yellow house of Mrs. Mozier's. The

(Testimony of (Mrs.) Mary Edighoffer.)

yellow house give two jerks that way and went north. I don't think I saw the house catch on a pole—there was too much water there. There was a good deal of water around there when that wave struck the yellow house. Just a second after it struck there and struck that green garage of Drake's, well it wasn't very long, and it struck that high bank back of Ostby's and Sletten's and it came over Sletten's and Ostby's yard, and Ostby had a stone wall two and a half foot high, and it went over that. That wave went [354] over the rock fence around Ostby's yard. I don't know how deep it went into Ostby's house; it went into his windows—his basement—his basement windows. On the south side of the house it went into the basement of the house, and it may have gone in on the north side, as well as I know; it may have gone in on the north side too. I can't tell you what time of day that was it went into Ostby's windows; can't tell you what time of day any of it was in particular, because I had no thought of the time.

Q. Did you see anybody cross the county bridge that day, before the flood, going out from Wibaux?

A. I saw myself go across that foot bridge. When I first went down there, I didn't stay long either. As to the condition of the ground under the foot bridge when I went back, it was all right then for a few minutes; the water come under there pretty mighty soon after that. When it first come under that, I should think it was a couple foot deep, maybe a little more, maybe a little less. The width

(Testimony of (Mrs.) Mary Edighoffer.)

of it, when it first came under the foot bridge,—well, it filled the creek bank-full and clear out across that way—I don't know what they call it—they used to have a tennis court there or something, and it came clear under the foot bridge. I started back towards the Davis Addition before it came under the foot bridge. There was quite a few with me,—I think Roxey Hines (Roxey Trollope)—Roxey Hines; there was a good many of us; there was a number of us—I couldn't tell you how many or who they was. At that time I could have gone across the county bridge to town, but I didn't want to—it didn't look good; it didn't look like I could get back, maybe. The trees hadn't lodged there then,—not until that big wave came. Oh, there was a little trash, but nothing to amount to anything; that big wave filled the thing full.

Q. You said you could cross the county bridge, but you didn't want to. That didn't mean you didn't have any business in town, but that it was that the bridge was peculiar?

A. I had business [355] in town, but it didn't look good to me, the way the water was coming down there you might be caught where you couldn't get out; and I felt like over in town was a little further from the hills at that time too, and I had no reason to go over there. So I went back towards the hills, or where I could get to the hills, if I wanted to. I think Roxey went back at the same time I did, and she might not, because there was

(Testimony of (Mrs.) Mary Edighoffer.)

some coming down to look. When I came back this way, the water started to come under the foot bridge or sidewalk—the raised walk—under it and over it and everywhere else. It didn't stop them from going when that wave of water was coming, I can tell you that. As to whether it stopped them coming,—well, it wasn't that whole length of that foot-bridge. It was somewhere about the point you are pointing to when I started there; it was around so it hit the corner of that foot bridge; it was at the corner, the angle, somewheres about there, was where it was when I started back. As to the way the water rolled then, it was going north then; it was not going out over the county road then; it got out over the county road when that second roll of water came down.

As to the depth of the water up near the green house when I came back from the county bridge, it was clear over Sam Austin's car. You probably know what kind of a car he had better than I do—Chevrolet, or something—it stood on the south side of the house, and the water was over the top of that. Sam Austin's car was standing right by the green house, south side of the house.

Q. And when you came back up the foot bridge and looked over that way, the water was over the top of Sam Austin's car?

A. No, sir, it wasn't; I got out of there before that, yes, sir. As to whether the water was over Sam Austin's car when I started walking towards the county bridge,—there was no water there.

(Testimony of (Mrs.) Mary Edighoffer.)

Q. When did you first see the water over Sam Austin's car?

A. Well, it was awful quick, a mighty few minutes—if it was minutes at [356] all; it was pretty quick.

Q. What I want to know is whether you saw the water over Sam Austin's car or around Sam Austin's car as you were going towards the county bridge or as you were coming back, or as you were standing at the county bridge?

A. It was after I got back and I was standing over by Ostby's, that roll of water came down and it came down over the stone wall and over Sletten's yard, and we kept moving out of there, because the telephone poles was going down and everything, and we was getting out of there as fast as we could.

Q. Were the people moving north to south out of their houses that morning?

Mr. McCARTHY: Objected to as repetition.

The COURT: That is a pretty general question; that covers a large territory.

Q. In the Davis Addition I am asking about. I am pointing to the model.

Mr. McCARTHY: We have no objection to counsel continuing as long as he wants to, but Mr. Hall is afraid your Honor will get impatient.

The COURT: You have repeated yourself a number of times, and I have tried to be patient thinking you would change to something else. Let her answer this question.

(Testimony of (Mrs.) Mary Edighoffer.)

Q. Did the people in the Davis Addition move out of their homes on June 7th, from north to south?

A. Why, of course they did.

Testimony of

(Miss) EDITH JONES,

who had been first duly sworn as a witness in behalf of the defendant at the trial of Case No. 2444, Wibaux Realty Company, a corporation, (and other cases) vs. Northern Pacific Railway Company, a corporation, in the District Court of the Sixteenth Judicial District of the State of Montana, in and for the County of Fallon, at Baker, Montana, on [357] the 12th day of January, 1934, was pursuant to stipulation, read at this time by the court reporter, as follows:

“Direct Examination by Mr. McCarthy:

My name is Edith Jones. I live at Glendive, Montana. In June, 1929, I was living two and a half miles south of Wibaux; was living with my mother and my brother. We were about a half a mile I think, to the east of Beaver Creek; it might not be that much, but near that. I am 22 years old. On June 6 or 7, 1929, I was living with my mother and brother out at this place two and a half miles south of Wibaux. I know it stormed that night—June 6th—I don’t know what time and I don’t know how bad a storm, but it brought up the dry

(Testimony of (Miss) Edith Jones.)

coulees, and there is one on each side of the house. I got up on the morning of June 7th shortly after daylight—maybe 3:00 or 3:30, I wouldn't want to be exact as to time. As to what I observed when I got up,—just south of our house there is quite a deep, dry gulch; there is a graded road—there is a grade across this and two culverts there, and the water was running over the grade at this time; there is a bridge between our house and our barn and it covered this to quite a depth. I had lived at this place 17 years. Comparing the water I saw on the morning of June 7, 1929, with any water I saw before, will say that in 1921 there was a great deal more water there than there was that morning; there was a lot more water there in 1921 I think, than there was that morning.

After I got up and saw this water, I went down by the bridge that is between our house and barn and I knew I couldn't cross by foot. Our saddle horse was on the other side. I went south from our house and crossed the road grade. The water was down then and maybe an inch or two,—it didn't bother me to walk across it and I went to the barn and saddled my horse and rode south so I could get a fairly good view of the creek. As to where I rode to this first time,—right south of our barn there, there [358] is a cutbank; it is a slope from the barn, but it is a cutbank on the south side. When I got over in the vicinity of the creek where I could see the water in the creek, I

(Testimony of (Miss) Edith Jones.)

sat on the horse watching the water there in the creek and the different gullies as they came into the creek. The creek was up, but it wasn't serious; it was like Beaver Creek is when there is a hard rain. It drains a lot of territory and there is lots of drains into the creek; and I could see that it was raising, but it wasn't serious right then. There was a draw right south of me quite a little ways and there was a lot of trash coming down in that, and I rode across and rode down to this draw,—that was a draw emptying into Beaver Creek. Well, I crossed this and there was right over the culvert, a hill south of that and I rode up on that where I could get a better view of the creek. When I got up on the hill, I looked at the creek most of the time. The creek was coming up all the time; I could see that it was raising quite rapidly. Then I turned and went back then to where I had first seen the creek, it was directly south of our barn,—I went back to our own barn; it is directly south of the barn. My curiosity got the best of me again and I sat there and watched the creek for a few minutes. As to what I saw happen to the creek at that time,—the first I noticed anything different, I could hear a muffled roar, it was almost like thunder, still I knew it wasn't thunder; it didn't have exactly the same sound thunder has. After I heard this muffled roar that I speak of, I looked down the creek to the south, down towards Clem Parker's place and I could see a bank or low wall of water

(Testimony of (Miss) Edith Jones.)

coming then and boiling from the bottom to the top. The bottom seemed to be going faster than the top of it, because it was boiling up—rolling up. As to how wide this water was that I speak of, will say that in some places along the creek between where I saw it and where I was, there was some very definite banks,—there were steep banks on both sides of the creek. [359] There, it wasn't so very wide, but it spread out to a quarter of a mile wide, maybe wider.

Q. How high was it?

A. About so high.

Q. Indicating what?

A. That high.

Mr. McCARTHY: All right; may we have the yard stick? (measuring) About three and a half feet, would you agree on?

Mr. MAURY: We agree Miss Jones pointed to 3½ feet.

Somewhere about three to three and a half feet in height, that is what I mean. That doesn't mean the water from the bottom of the creek to the top of this wave; it means from the bottom of the wave. From the bottom of the wave to the top of the water, it was 3½ feet, it seemed—to the top of the water above that. After I saw this wave or wall of water coming down the creek, I watched it for a few minutes and you could see back of this wall of water to the south, I could see a more definite raise of water. I mean by that, that maybe a quarter

(Testimony of (Miss) Edith Jones.)

of a mile back of this first wave of water, there was another one that seemed to be larger, but it was coming swifter and it wasn't boiling as much; it was smooth; it was steadier, and then back of that there were several smaller ones. After I saw this condition—well, I don't know why, but I went north to where I could get through the fence onto the road again, the east side of our place, south of the house, I cut across the field and down the road past our buildings and across another culvert and into another one of our fields, and then west again to the creek. This wave of water was still to the south of me when I got there; it hadn't passed me while I was going around, but it was still to the south of me, and I followed it then or went with it; I went along to see what happened or what it did. Well, I went about a quarter of a mile, I believe it is, across to the west side of that field and I had to stop to open a gate. Quite a few of the gates are on a knoll, I [360] couldn't say how much higher than the surrounding land,—it was on a knoll, and there were two cows there belonging to Mr. Parker on the hill east of there. I opened one gate and I drove one of the cows through and upon the hill, and as I was going off the hill, I had to wade this horse through water; the water had come past me and surrounded the hill and there was quite a bit of water around. In taking that horse through the water she had to fight; the water was so swift for her, it was hard for her to stand; she labored to

(Testimony of (Miss) Edith Jones.)

cross it; the water was almost up to her flanks—maybe it was to her flanks, I wouldn't say exactly. Well, I got through this water and I went straight north,—I drove the cows a little to the east so they would be out of the water—and then I went directly north to the hill,—to the hill directly south of the Davis Addition. There I opened the corner of Mr. Sletten's fence, loosened the wires and let my horse through. When I got through the fence, I could see the creek roaring and at places I could see it—there was still places I could see the creek. That was the roar of water coming down the creek. When I got through the fence, I wanted to get down town, to get to the Davis Addition. What I first wanted to do was to get on the highway bridge to watch these waves of water as it went by, but to get to the Davis Addition I had to go west, but the water was on the west of me and I had to go east; and there is a plot that is fenced there south of the Davis Addition and it extends into the east edge of Possum Hollow, and I went around the corner of this and I had to put my horse again to get to Possum Hollow. The water in Possum Hollow was coming from the east. I didn't see any water coming at that time from Beaver Creek back up towards the Davis Addition. The water from Possum Hollow was running north real swift. When I got over this fence just beyond Possum Hollow, I didn't stay there, I broke my horse into a run then; I run

(Testimony of (Miss) Edith Jones.)

her down to the Davis Addition and down the main street of the Davis [361] Addition,—I don't mean the main street of town; I don't know the names of the streets—what I could call the main street of Davis Addition. Then I slowed my horse down as I passed some buildings there; I didn't stay there, but I stopped and I slowed my horse considerable, and I went about half the length of that elevated foot bridge that is there on the Davis Addition; I didn't go down the foot bridge, I went down the road. I have ridden a saddle horse on that foot bridge; you are not supposed to, but I have. That morning, I did not ride on the bridge; I was just a few feet to the east of it. I observed while I was a few feet to the east of the bridge that the creek was coming up so rapidly and this wall of water had just cut across the country directly north of Mr. Massey's buildings and it had spread out then and it wasn't near as distinct a wall of water as it was before, but I could still recognize it. As to what this wall of water did—where it went to—there is quite a quick creek bank there, but it didn't have much effect on the water,—it went right across the flat to—well, from where the creek turns to swing east, south of town, it come across there to the north, it went through the town—through the buildings, the residences. There has been a building referred to as the green house—the Mattie Miller house—I know where that is. This water went, with reference to the Mattie Miller

(Testimony of (Miss) Edith Jones.)

house, it was some to the west of that where it first crossed the creek bank. The water got up to the Miller house. There was an object near the Miller house that I could catch the height or depth of the water by,—there was a car sitting alongside the Miller house and it covered that; the water covered the automobile alongside of the Miller house. From where I was, I couldn't be accurate as to how far to the west this wave or wall of water extended, but I believe it went to the west of the Kinney house; I am sure it went to the west of the Kinney house. This car that was alongside of the Miller house was an open car. I didn't stay [362] there at this place; I turned around and went back to in front of Trollope's house and there was water that morning coming from Possum Hollow, the runway from Possum Hollow where it runs down into the town, it wasn't cutting across or anything.

Q. What about the water coming down by Massey's and Mattie Miller's house and through there, did you see any other unusual conditions in the water in that vicinity?

A. Just how do you mean?

Q. Well, I wondered whether anything unusual happened in the way of water at any other time than this one wave of water you saw?

A. Yes, the water came on, it kept rising there. That water went, when it was rising, through the residential district, west of the creek. By west of

(Testimony of (Miss) Edith Jones.)

the creek, I mean that part of the creek,—well, where the creek turns northeast of the Mattie Miller house.

I saw more than this one wave or wall of water in the vicinity of the Miller house and that section of town; the rest of the other waves of water that I saw coming they were spread out then until they weren't nearly as deep or nearly as thoroughly defined, but they were still distinct raises in water; they didn't attain as great a height as the first one. These other waves of water that I speak of went across the valley that Wibaux is in; they went into the town.

Q. Did you see any buildings or any property moved there that morning, any time you were down there in the vicinity of—after you got into the Davis Addition or when you were down near the county bridge, or when you had come back near Trollope's house, did you see any buildings or sheds move there?

A. There was a green shed there by the Mattie Miller house that washed away; it was sitting just south of the Mattie Miller house before—it went with the house; and there was a yellow house, I didn't see that move off its foundation, but I saw that when it was in the water. As to where the yellow house was when I saw it—well, there is a place that I have always known as Cullen's place; it [363] is where Tom Parker has his—it belongs to Tom Parker now. I believe I can point out on

(Testimony of (Miss) Edith Jones.)

the relief map where this yellow house was when I saw it moving; that (indicating) is the yellow house I believe it is supposed to represent, and it was down about in there; it would be about down in that far when I saw it. This is the house; it was down in here; it wasn't back of the house; it was on this side of the house.

Mr. McCARTHY: The witness indicating as the yellow house a point approximately two inches east of the easterly part of the city water tank.

That is where the yellow house had been. When I saw it, it was moving north, and it had already got as far as Second Avenue South when I saw it. It was moving when I saw it—slowly; it didn't have much speed. I wouldn't be positive when I saw the yellow house with reference to these waves, but I think three of them had broke on the highway bridge before I noticed the yellow house—before I paid any attention to it. The best that I can say, I believe the shed that was moved away from the vicinity of the Miller house lodged under the county highway bridge.

As to how the water—how high the water got there in Beaver Creek that morning or where it spread to, while I was there, it spread up to somewhere on the Davis Addition, I don't remember just where the water stopped along the Davis Addition, but it was quite deep in other places. The water I saw in the Davis Addition was moving towards the north.

(Testimony of (Miss) Edith Jones.)

There was a bridge to the south of Massey's place, it may be a mile; I don't believe it is quite a mile, I don't think it is quite that far. I know that bridge was washed out. When this water struck it, I could see the bridge give; I didn't see it go. That was before I went down into the Davis Addition at all. That bridge was washed down into Mr. Massey's I believe. I wouldn't say that, it may belong to Mr. Woodhouse; it was down in this [364] hill between where it belonged and town. I don't believe this house that it was washed down to—the general location—is shown on the relief map.

Cross Examination:

(By Mr. Maury).

I have read the story of Paul Revere's ride—where he notified the Continental Army of the United States of the approach of the British troops, at Lexington or Concord, or wherever it was. That morning, I got up shortly after daylight, between 3:00 and 3:30 would be near correct.

Q. It was about the summer solstice was it? *
About the shortest night of the year?

A. Along about that time, yes. I believe that I got a very close vision of everything that morning. The sun rose before 4:00 o'clock I believe—close to 4:00; it was nearly 4:00 o'clock when the sun rose. Maybe that is the time the sun rose. I paid no attention to it close; I was going by that time of the year. It was around 4:00 o'clock that I first heard the roar of the waves.

(Testimony of (Miss) Edith Jones.)

Q. Around 4:00 o'clock the sun rose?

A. Maybe a little after that I first heard the roar of the water. My mother's home was maybe half a mile from the creek bank; maybe a little more—maybe a little less. I haven't any idea how high it is in elevation above the bottom of the creek. It would be mere guess work if I made any statement as to how many feet in elevation it was above the bottom of the creek opposite my place. It is maybe 10 feet,—maybe more. The water didn't get into my father's house.

Q. At all, in 1929 or 1921?

A. In 1921 the basement was full of water, but no connection with water in the creek or Possum Hollow. It was merely water that drained off the slope to the east of our house. Neither flood invaded the house of my father.

I believe that what appears in plaintiff's exhibit X-9 is a picture of what is known as the Mattie Miller house; it has a [365] bank in front of it; it is a green house; that is what I spoke of as the green house. That bank in front of it according to my memory, above the ground—above the stream bed, is maybe four or five feet, something like that,—maybe six; I haven't any idea about how far land is in feet. I could see very little of that bank when I first saw it on the morning of June 7th. I couldn't say that I could see any of it on the morning of June 7th when I finished up my ride; I couldn't see any of it—when I got there; I don't

(Testimony of (Miss) Edith Jones.)

believe I could see any of it when I got there. I don't remember if the water was around the foundation of the Mattie Miller house when I got there. I knew as soon as the wave of water struck it, it was up over the foundation, but before that—

I didn't cross the county bridge in Wibaux that day. It might have been 6:00 when I got to Wibaux; it might have been a little before that. I am acquainted with John Bailey. As to how long I have known him, I was quite a small girl when I—it is quite a while. I don't remember that I seen John Bailey, that I know of. I am acquainted with Mr. Massey; I didn't see him that morning; it might have been afternoon before I saw him. I am acquainted with Mr. Ostby; I saw him that morning; he was in the south end of the Davis Addition; I might have talked to him. I didn't notify him there was a wall of water coming down the creek. As to whether I beat that wall of water down or whether it beat me in the race,—it was coming; when I got there, it had already come to Wibaux; I believe I would say it beat me there; it beat me very little. As to how high it was when it got to Mattie Miller's place, will say that it wasn't as distinct as it was when I first saw it, and I don't believe it seemed to be as high; it was maybe two and a half to three feet high—maybe three feet. As to its width across country,—well, it spread out as wide as the valley would let it spread. As to its height when it passed Massey's place, I didn't see it then, I was out of sight of the [366] creek. My

(Testimony of (Miss) Edith Jones.)

father's residence is two and a half miles from Wibaux; there are hills between; by the road, there are four hills. I didn't cross the creek to go to Clem Parker's cabin; they are on the west side of the creek. My father's house is on the east side of the creek.

Q. Then how did you handle Clem Parker's cattle?

A. I didn't handle Clem Parker's cattle; it was Ira Parks' cattle.

Q. I thought you said Clem Parker's cattle?

A. No, sir, it was Mr. Parks' cattle.

Q. She said the Parker cattle. If you said the Parker cattle, you did not mean the Parker cattle?

A. I am sure I said "Mr. Parks' cattle." Mr. Parks lives up in the hills here some place. From Beaver Creek he lives maybe a little over a quarter or a half a mile, something like that, and to the east of Beaver Creek. They were milk cows; I believe one was a Holstein and the other a red-and-white cow; the Holstein was black and white. I didn't see this water as it passed by Parker's house; it was to the north of Parker's place; I never saw it at Parker's place. Parker's residence is not down the creek from us and between my father's home and Wibaux; it is still south of our place, probably a mile.

There are three coulees I believe, coming into Beaver Creek between our place and Ira Parks' place. When I started out that morning, there was

(Testimony of (Miss) Edith Jones.)

running water in those coulees, but it wasn't enough to stop a person going across—from going north.

Q. From going north. When did you cross them?

A. Some of them, I crossed them at different times, of course. I crossed each of them once that morning, but it wasn't at the same time that I crossed any of them. Those coulees are maybe a quarter of a mile apart—maybe nearer to a half—going over the hill, coming across the country. I didn't get down near the road at Massey's place. I didn't see the bridge on Beaver Creek go out—the bridge I spoke of as having gone out, the one up near my father's place. [367] I couldn't tell you what time it went out, I don't know. That bridge is between the place that the coulees enter the stream and Wibaux. One of those coulees drains the west half of section 19 and the other drains Mr. Parks' place. I would say that the area drained by the first one I mentioned was approximately half a section. I understand a section of land is 640 acres. Maybe it would be near 200 or 300 acres that it drains in there—maybe not quite. The other coulee that I crossed drains a quarter section of Mr. Sletten's land, and I wouldn't say how much of Mr. Parks' it drains; I never followed the coulee. I don't believe it drains half a section, it is less than that. When I first saw those coulees, while there was some water flowing down, yet one could easily cross on horseback.

(Testimony of (Miss) Edith Jones.)

Q. Did you cross on horseback when you first saw them and then go back towards your home?

A. I didn't go back towards my home until near noon. No, it wasn't quite noon; it was during the forenoon, and that was after I had made my visit down to Wibaux. The condition they were in then as to crossing them on a horse, there was practically no water in them; in puddles there was, but I don't believe there was running water in them. That water that came down those coulees with a rush that morning, as to when it fell or when it fell from the sky, will say that it rained before that; there was rain the night before. I don't know what time the rain was the night before. That was the water of the rain of the night before, that I saw. It didn't rain at all after I got up that morning—well, it was sort of a mist when I first got up, but I wouldn't call it a rain; the air was damp; you could tell it had rained just before that; the ground was what we would call "steaming".

Q. It had a "sweat". Buoyant to the spirit and the imagination?

A. Well, I wouldn't say as to the imagination.

Q. I was not protesting, by the way, on that subject, there will [368] be no objection to this record being used for a short story for a magazine.

A. If you can make anything of it, go ahead.

The coulee directly south of our house had the greatest rush of water down; it is between the house and the barn. That drained considerable more than half a section; (the one I described before was

(Testimony of (Miss) Edith Jones.)

north of the buildings). It drains one half section and one section and another section and another section, and I don't know how much farther east it goes after that. The rain that came rushing down that coulee formed before I got up. I can't tell you how much, in feet, that coulee is from the other coulee—the one to the north of the house—but there is the high-line runs past there, and there is two high-line posts in between. That coulee I described to the south of the house, is a little ways west of the house and a little ways east of the barn—runs between the house and the barn. I believe that that coulee may be a little above the bed of the creek, but it isn't a great deal. As to how far the floor of my father's house is elevated above the lower thread of the stream or where the stream is in high water, in that coulee,—it may be two feet, maybe not that much. You mean the floor of the house or the foundation? Well, I believe the floor of the house is on a two-foot foundation; there is a gradual slope, I have no idea; there is a very slight slope to the edge of the draw. My father's house from the middle thread of the channel going down the coulee, across country, is maybe 200 feet,—I don't believe it is that much. The barn from the thread of the coulee is about the same,—maybe a little more; about 400 feet between the house and the barn, and the coulee running right between. There was not a bit of water got in the barn. As to the depth of the water running down that coulee that morning, will say that the bridge, I believe, that runs between the house and the barn is maybe four or

(Testimony of (Miss) Edith Jones.)

five feet from the bottom of the stream, and it was maybe two or it wasn't over two [369] and a half feet above the bridge. At no place there was the water more than seven feet deep that morning between the house and the barn. There was none of my father's cattle or anything of his that was washed away.

Q. What plows or wire fences or great pieces of machinery, or anything like that was washed away at your father's place, from this draw?

A. There is a hog yard just to the north of our house and it is across the draw and there was wooden panels across the draw to close the place that the draw made and there was wire that run across the road; that was in the same coulee. As to the width that the creek was when I first saw it that morning, I believe it was about as much as it could be without overflowing its banks—breaking loose from its banks.

Q. It was running level with its bank—like the time Cassius invited Julius Caesar to take a swim?

A. It is Greek to me.

The next coulee to the north from the house, there wasn't near as much water coming down there that morning when I saw it, because it doesn't drain near as large a territory. That water too had fallen the night before. That wasn't the one that I crossed with the water fairly well up on the mare's flanks; the one that I crossed that it was up on my saddle horse's flanks was north of the house that crossed

(Testimony of (Miss) Edith Jones.)

the lanes; it runs between our place and Mr. Sletten's. As to how close that lane is to the main creek,—the gate posts is set as close to the cut-bank on the edge of the creek as they can be set without pulling up. When I crossed that, it was maybe a little after 4:00.

Q. Was that before you had rescued the cows of Ira Parks'?

A. As I opened the gate, there was no water around me, and after I opened two gates and "threwed them away", the water had surrounded me,—it came from the south. It was over the banks of the creek when I had opened two gates. I don't know how far it had gotten over the banks of the creek, but surrounding this knoll [370] that the gates were on,—that I and the cows were on—was considerable higher than the land around and it had filled the gully that surrounds this knoll. What filled the—what came down the gully—was not partly coming from the east—that was all creek-water that came past me there. There are rises of land around the edges of the creek from that point to where I live—hills between the house and—As to seeing over them—well, to the north and west of our buildings from our house, from the north window or west window you can see the creek when it is bank-full; otherwise, you can just see the banks of the creek.

I have not been a witness in any of these cases before; was not a witness in the case of Heckaman

(Testimony of (Miss) Edith Jones.)

vs. Northern Pacific Railway Company, nor in any of these cases; this is the first time I have been a witness. I don't remember exactly what day it was that I first told my account of this to some representative of the railway, but it was about two weeks ago Mr. Sheehan asked me if I would come down here. I wasn't working right then. I had never discussed it with any railway employee before; I have discussed it with different people around Wibaux there. I have talked about it to my mother and neighbors,—the neighbors Mr. and Mrs. Lawrence. Mr. and Mrs. Lawrence are not here; I have an idea they are in Wibaux or on their farm directly south of Wibaux. It was a common occurrence to discuss it with most anyone else. Roy Sletten,—I believe I first talked to him about it the morning of the 8th of June, 1929. I don't know as I had told him all I had seen, but we discussed the flood in general. About these walls of water, I have an idea I talked to him about it, the same as anybody else. As to others that I talked with about it soon after June 7, 1929, I talked about it with Ed. Parker's boy, Gene,—and Cyril Parker. I wouldn't say when I talked with him about—about what I had seen,—but directly after the flood, within a few days. I told them about having seen a wall of water. I don't know as I [371] told them the course it had taken; we was merely discussing the topic. I told them I had been in the Davis Addition rather early in the

(Testimony of (Miss) Edith Jones.)

morning of that day and what I had seen there. I discussed it with lots of people, but I don't remember now who they are or what I said to them.

Mr. MAURY: Is Mr. Sheehan here? Will you stand up? Is that the gentleman that you discussed it with about two weeks ago?

A. Yes, sir.

Q. Handsome fellow! Where did you discuss it with him?

A. We were standing in the hall of the Cannon Hotel at Glendive.

Q. And you told him about the flood, or did he ask you?

A. I told him; he had spoke to my brother, Owen, a few nights before that. My brother, Owen, I believe is 27 years old, I am not sure. He was out attending to the cattle that morning. He was not out on that trip to Wibaux; I was alone; he didn't ride with me that day.

When I got down to Wibaux and to the Davis Addition, if I did see Mrs. O'Keefe, I don't remember it; I remember seeing her sometime during the forenoon but not when I first got there. When I saw her first, I believe she was—I wouldn't make a definite statement—but I believe she was to the south end of the Davis Addition. That was almost where everybody was gathered that were in the Davis Addition in the water district; some in Mrs. Hayes' house; some sitting in their car, and moving around generally. When I got there where Mrs.

(Testimony of (Miss) Edith Jones.)

O'Keefe was, Mr. and Mrs. Sletten were there, and Mr. and Mrs. Hayes; I don't know about Mr. Hayes, but Mrs. Hayes was there, and Mrs. Lynch.

Q. Did you tell them about this approaching wall of water?

A. The water was "doing its worst" when I was talking to them. Mr. Trollope was the first man I seen when I got to town; he is the only one I have a distinct recollection of. He was out to the west of his house. That is his house right there (indicating); he was out here either in the yard or alongside of it. [372]

Q. Mr. Trollope's house is on the east side of Beaver Street and on the north side of Olive Street?

A. He is on the north side of Olive Street and it is the corner house. As to how many houses were then between his house and the bank of the stream, looking towards the Mattie Miller house, there was Mr. Sletten's and what now belongs to Mrs. Woods, and the Pollock house. I did not go with Mr. Trollope; I went alone, north. I "ended up" about half way down the wooden foot bridge. I don't know what Mr. Trollope was doing when I first saw him,—I was excited. Almost anybody would be excited to see that much water come down Beaver. There was a great deal of water coming down Beaver Creek when I was talking with Mr. Trollope—more than I had ever seen coming down before; that is what made me excited. I saw more opposite my house in 1921 than in 1929 when I first saw it.

(Testimony of (Miss) Edith Jones.)

Q. The additional water had come down these three draws——

A. It filled the bank between the barn and the house in 1921, that was filled full.

Q. I am talking about 1929 now. This additional water to the main creek had come down the coulee right south of your house?

A. Well, all of the coulees emptied into the creek. It had come down those three coulees, as you understand.

Q. Because, when you first saw the creek that morning, as you were able to tell us, the water in the main creek was not so high as you had seen it in 1921?

A. I wouldn't say that exactly. I have no distinct recollection of the water in the creek in 1921. I know the water was high; I saw it, but I don't know just how high.

Q. Refreshing your memory with your testimony given about an hour ago, did you not answer this morning to Mr. McCarthy, that the water that you saw when you first got up, in the creek on June 7, 1929, was not so high as you had seen it in 1921?

A. Well, undoubtedly, it wasn't quite as high as in 1921, because I know it overflowed the bank in some places in 1921, and it had not [373] overflowed the bank when I first saw it that morning.

Q. And it would be your best calculation that the additional water which resulted in a wall, came down these three coulees?

(Testimony of (Miss) Edith Jones.)

A. No, sir. It came from the south some place, absolutely,—some distance south of our place altogether. It came from some place from the south,—I don't know where it came from. It undoubtedly came past Clem Parker's place. It did not come from those three coulees—not the wall of water—did not come from those three coulees. It must have come by Clem Parker's place—it would have had to. Because there was no rain falling between the time that I first saw the main creek that morning and the time that the water went down in Wibaux; and I would think that it must have come from the region of Brophy's place, or south of there. I wouldn't say where it originated because it was beyond my line of vision. I first saw it to the north of Clem Parker's place, because there is a bend in the creek and it spread over this bend. *

Q. When you first saw it, how high was it above the level of the main stream in front of you and between the banks?

A. I don't know how high the banks are there, but there are steep banks——

Q. We are not getting at the height of the banks, but the height of the wall of water between the banks. How high would you say it was when you first saw it, from the top of the wall down to the water inside?

A. It was $3\frac{1}{2}$ feet or 3 feet 8 inches. The top of the wall was above the banks. As to the height of the wall at the edge of the banks, well, it spread

(Testimony of (Miss) Edith Jones.)

out over the banks for quite a ways. It spread out from the stream where it possibly could; it spread out as water naturally will. As to how deep the wall of water was over the banks when I first saw it, maybe after it spread out, there was two foot—two feet over the banks in places; maybe some places higher than that. As to how deep the wall of water was just over the banks, as it [374] proceeded down through the valley, it would have to be mere guesswork to say anything like that.

Q. I know. That is what we want; we want the best kind of guesswork.

A. Because, some places water would extend out to a great extent and naturally, it was somewhat lower where it was compressed in between banks.

Q. How much lower where you saw it over the banks from Parker's place?

A. It must have been some lower, because the ground was higher up there. There are sloughs to the west of Parker's place, I don't know as west of his house, but to the north and west of his house there are. Those sloughs take in quite a good territory; they take in quite a bit of pasture there. The water passed over those sloughs.

Q. Did you see any of Mr. Parker's sheep?

A. I don't know if I saw any of his cattle. I don't know whether the water got into Mr. Parker's house. I don't know whether Mr. Parker's house is on the same bench as Mr. Burke's house, or not; Mr. Burke's house may be lower, I wouldn't say to that. I know Mr. Massey's house. As to whether

(Testimony of (Miss) Edith Jones.)

all three of those are on the same bench of the river, will say that I believe Mr. Massey's house is a little the highest; Mr. Burke's is lower than Mr. Massey's; and Mr. Parker's, further to the south than Mr. Burke's, is possibly a little higher than Mr. Burke's.

I don't know what became of the county bridge up near Mr. Brophy's place. I would say that that bridge was not washed out in the flood of June 7, 1929, because people used to go past our place to this bridge, to go to the west side of the creek. I have crossed that bridge by Brophy's, but not often. It is a familiar sight to me. It is not standing there just the same as it was standing before June 7, 1929,—well, it is the same bridge. It is a wooden bridge; I wouldn't swear to that, but I think it is a wooden bridge; I think it has always been a wooden bridge to [375] the north of Brophy's place—between our place and Brophy's. Pointing out (on defendant's exhibit Y-13) my father's place—the one that I started from that morning,—this is north? We live on the southeast corner of 24, township 14, range 59.

Mr. McCARTHY: Write in the full name "Jones".

A. It is not big enough to write "Jones".

The creek bends around quite a few places; it runs in a northerly direction. The map here shows the bending of the creek at our place; I believe that would go through what land we have there now.

(Testimony of (Miss) Edith Jones.)

This bend might have been half a mile from my father's house. Directly at our place there are not very long meanders on both sides east and west, of the general course of the stream.

Q. Well, right opposite your place?

A. But north of our place, the creek does a great deal of winding. Between our place and Wibaux, the creek makes long crooks or meanders; in fact, it makes two exceptionally long meanders to the west.

I heard one airplane real early that morning; there was one went over early in the forenoon; one crossed in the afternoon and I believe I didn't have any recollection of any others. As to where I was when the first airplane went over,—the one that went over real early in the morning, it might have been what woke me up in the morning; it was real early in the morning, I don't know, I don't remember whether I was up or not when that airplane went over, I remember it going over, but I don't remember just when it went over. When the second airplane was observed, I was in the south end of the Davis Addition. I had been there—I might have been there quite a while, I don't remember,—about an hour and a half,—maybe more, maybe less. About the length of time I had been there, it is merely guess-work; I paid no attention to the time that morning. I don't remember who I was standing with when that second airplane went over; there were so many people around there,—I mingled

(Testimony of (Miss) Edith Jones.)

with them all. When the county bridge at Wibaux [376] went out, I was between Mr. Trollope's house and the Davis part—As to who I was talking to,—you are assuming that I was talking—I suppose that I was, I usually do, but I don't know, there was probably a number around there that I was talking to, but maybe I was just talking to one. I remember Mr. Trollope was there; he is the only man I have distinct memory of that day,—him and Mr. Sletten.

I have not been sitting here during this trial. I have heard none of the Wibaux witnesses, only the surveyors; that was the first I remember, when the surveyors were up here.

What I spoke of going out was not a "little" yellow house; it was a pretty good-sized house; it was brown. That was the house by the water tower. It washed down near the railroad bridge. I don't know what course it took—where it went, but the first place I saw it, it was from near the intersection of two streets there. On the model, I don't know exactly where it was when it lifted up; there (indicating on model) is the water tower; that (indicating) represents the house; it may have been a little this way. I am now indicating the house between the two long lines of the dyke there,—I believe it was a little more this way. I don't remember where, the course that it took,—but in through here (indicating); it was along there some place when I first saw it. It went down the swale. When I first saw it, it was in here,—when I first saw it after

(Testimony of (Miss) Edith Jones.)

it left its foundation. Then, it was along on this street near this house, I remember that. I saw the Methodist parsonage go out; that started from west of the church there. It went out into the street and it turned into the east and down by the blacksmith shop and down back through here and on down. I don't say as to whether the county bridge had gone out then, I don't remember. As to how long it took the parsonage to get from where I knew it was standing on its foundation, out into the main channel of the stream, will say,—as [377] fast as things were happening that morning, and the way it seemed to me, it probably took it a while, but still, it wasn't over a few minutes,—I don't know. It seemed like it took it an awfully long time to go down the stream and land on the railway bank.

Q. By “awfully long time”, would you say 20 minutes?

A. Maybe half an hour, or anything less than an hour. I didn't see any barrel floating in that stream that morning. I noticed people moving from north to south out of houses,—out of the Davis Addition I did. It was directly after I got to town that they started moving from north to south on the Davis Addition,—just shortly after I got there. People that I knew that were moving from north to south in the Davis Addition, were—Mr. Sletten and his wife moved out. Their house is that large square house just south of Mr. Ostby's,—this house

(Testimony of (Miss) Edith Jones.)

you are pointing out. They weren't moving when I got there; it couldn't have been very long after I got there that they started moving, I would say it might have been half an hour,—it might have been over; I don't believe it was an hour before they moved out. I have an idea that it was around 6:30 o'clock that they started moving from north to south. Other people that I saw moving that morning from north to south,—Mrs. Lynch moved her children out of her house; it is the Baird house—it is south of Sletten's—not directly across the street, it is this house right here (indicating); that is right west of the word "Beaver". Mrs. Lynch started moving out quite a bit after the Slettens moved out, maybe 15 or 20 minutes. I don't believe I seen anybody moving their things, only their personal belongings. I don't remember whether I seen Ostby that morning; if I did, I forgot it. These people moved that morning to what I call the south end of the Davis Addition; it is a road that runs east and west along the south side of the Davis Addition; that is a road going to the west and up to Massey's place. The [378] majority of them didn't move to this high land here, but they were generally along the road. All of them didn't move out of the Davis Addition. In regard to who, and what residences, still remained occupied in the Davis Addition, Allie Meeks lived in the Betten-dorff house; I believe that (indicating) is the Bet-tendorff house, and all remained in there but one

(Testimony of (Miss) Edith Jones.)

boy. I don't believe the water entered the floor of that house on June 7, 1929; I believe it entered the basement, I believe it was—it must have been. That is all the name I know—"Bettendorff house", and as to what time water got close to that house, or around that house in 1929, will say it was before 7:30,—between 7:30 and 9:00; time didn't mean much to me that day. The best time I could give you that the people started moving from the north to the south in the Davis Addition that morning, is around 6:30.

I spoke to Mr. Parks shortly after about having rescued his milk cows; I don't know how soon it was after; it was before the talk of the flood died down around there. I was well acquainted with Mr. Ira Parks. When he first knew me I was two or three years old; he is one of the first of the people I have any recollection of.

Q. Would you say that when that wave or wall of water reached the top of the swale as we call it, that it came towards the east or went down the swale, which?

A. Well, it seemed to divide more or less, it bumped into the buildings, the majority of it I believe, went to the east,—the greatest speed,—towards the county highway bridge; not directly east, but it came in a general easterly direction.

Q. Just name the place where you think it divided or split, one part went east and one part went north down the swale?

(Testimony of (Miss) Edith Jones.)

A. No definite—As to whether it was some place in the district of the water tower,—it parted for the others, there is other structures, a series of them. I did not see it actually lift the yellow [379] building; I didn't see the yellow building until it was down on this E Street, whatever it is called; I didn't see it lift up. It was still floating when I saw it; it was partially buried in the water; it was heavy, it sunk to some extent. I don't know as it sunk down that far—like the Methodist parsonage that sunk almost to the roof—I remember seeing it, but I don't remember how much of it was covered with water.

It was before noon, I believe, that the water commenced to recede or go down, in Wibaux. It went down quite rapidly.

Q. By “quite rapidly”, how much in time before it commenced to fall in this section of town—not until the streets were dry, because there was mud—but until men in heavy overshoes could walk up and down Main Street?

A. Well, the time is all connected with incidents with me.

Q. Surely. What would you say was the time it first commenced to fall until men could walk around there in six or eight inches of slush and debris and mud,—that an hour elapsed?

A. It was an hour, possibly more I believe; possibly it was more. That much water couldn't have gone down, it don't seem to me, in that length

(Testimony of (Miss) Edith Jones.)

of time. * It did not. It was quite late that afternoon before I crossed to the business district of the town. Of course, other people went before, but it would be just safe that it would be going into the business district. I heard people explain that "the water is going down"; it was a general expression around there; they were all watching it, absolutely. As to how long after that time it took before people could walk up and down Main Street, will say that it was 3:00 or after before I went up Main Street. I got there by walking across what was left of the railroad trestle.

Q. The rails and ties were still standing?

A. The rails were still there.

Q. I mean the bridge.

A. It might have been a bridge, but it [380] didn't look like much of a bridge to me. I don't know whether there was a bridge standing when I walked across that afternoon; I don't know whether it was there or not; I know the railroad trestle was sagging terribly. It seems if the bridge was there, it wouldn't have been.

Q. Can you have any independent recollection at this time as to whether when you walked across on the railroad track over into the main section of town that afternoon about 3:00 o'clock, whether the bridge—the girders—the iron portion of the bridge was standing on the concrete work underneath or not? Do you recall? Have you any recollection of that?

(Testimony of (Miss) Edith Jones.)

A. All I remember is the ties and rails that I walked on; I was "pretty busy" walking across it when I crossed it. If the bridge was washed out, it was washed out before 3:00 o'clock.

Q. Do you have any memory now or not, as to whether that bridge was washed out or not?

A. I never paid much attention to it after I crossed back that afternoon.

Q. Could you find some witness that could tell us whether or not that bridge was standing that afternoon?

Mr. McCARTHY: That is objected to——

Mr. MAURY: We understand, it is embarrassing.

Mr. McCARTHY: It is not embarrassing to anybody but you.

I got back sometime that afternoon. I got back by walking across planks that had been laid across the ties on the railroad bridge. In town, that afternoon, everybody was talking to everybody else. The mud on Main Street was too deep to walk in in comfort; six to eight inches, probably a foot in some places.

I tied my horse way over on the south of Possum Hollow, way over by the outskirts of town. I rode my horse home. She was waiting for me where I turned her loose. It was late that afternoon when I got home.

There were three walls of water that I remember distinctly. [381] They were quite a ways apart, still

(Testimony of (Miss) Edith Jones.)

they weren't no mile or anything like that; they all easily fitted into about a quarter of a mile.

Q. All about the same height? Did they look like twins or triplets?

A. No, sir, not to me.

Q. Which appeared to be the oldest?

A. Well, the water in the front came first. It probably originated it. That one was maybe 3 foot 6 inches or 3 foot 8 inches high.

Q. Now, the next one, how tall was he, or she? I believe they call those things "she" up in that country?

A. Well, it might have been higher; I believe it seemed to be a little bit higher, but it was more of a continuous wave; it wasn't boiling and rolling like the first one. The third one was smaller than the other two.

Q. How would you say that compared in size with "number 1",—as a Fox Terrier compares with a Saint Bernard, or how?

Mr. McCARTHY: Now, if the court please, I think we have gone over enough things without going into the breed of dogs.

The COURT: Sustain the objection.

FRANK MIESOLOSKI,

recalled for re-direct examination by Mr. McCarthy, testified:

If I remember, I went four or five times down to look at the creek before going to bed on the night of June 6th. It was pretty late when I went down the last time, I think between 10:00 and 11:00 o'clock. The water at that time was probably a foot below the high banks of the creek; it was still within the creek bed, and it was on a level within just about a foot of the top of the bank,—maybe eight inches,—pretty close, and ready to overflow. [382]

Cross Examination by Mr. Maury:

I told you about that before; I think if you ask me, I tell them. I don't think this is the first time I ever told about that in court; I think I said it before, didn't I? I tell you why I went down to look at it four or five times that night: week before that, I dreamed that this water was coming. I didn't dream that Wibaux was going to be flooded—no, no. There was about few days before I had dream; there was water coming and I was trying to protect family with the car and go away——

Mr. McCARTHY: If the court please, I think we are going too far——

Mr. MAURY: It goes to the credibility of this witness.

The COURT: Yes, I think so. It is for the jury to say as to the credibility of this witness. * Is

(Testimony of J. D. Cullen.)

there anything further you want to cross examine this witness about?

Mr. MAURY: No.

J. D. CULLEN,

called as a witness in behalf of the defendant,
testified:

Direct Examination:

(By Mr. McCarthy).

Reference was made here with reference to my crossing Wibaux Street in the vicinity of Orgain Avenue on the morning of June 7th, and that I had in my hand at the time a neckyoke. I am the same man; I crossed that street with a neckyoke.

Q. Mr. Cullen, what have you to say with reference to there being water on Wibaux Street at that time, between the viaduct and up to First Avenue South? Whether water was running on Wibaux Street from First Avenue South?

A. It was coming down Wibaux Street towards the viaduct. It was coming south of the lumber yard that I managed at that time, going around and down towards the viaduct. [383] It was going through the viaduct from both—the lumber yard is on the right-of-way; it was going on both sides of the lumber yard into the viaduct, coming from the east and also from the swale on the west side of town, that was half way up there, coming down

(Testimony of J. D. Cullen.)

the south side of the track and then going through the viaduct. I could feel an effect of the current of the water on my legs when I was crossing Wibaux Street there at that time. The tendency of the water—the water was heading for the viaduct; it is down the street—downhill.

Cross Examination:

(By Mr. Colton).

Early in the morning I went down to my lumber yard; it was situated right here (indicating). I didn't say the water was coming from the "bridge"; I said it was coming from the creek and going west south of the lumber yard—by the lumber yard—to the viaduct, and at the same time, water was coming from north of the swale over here, east towards the viaduct. As to whether at that time there was any water on Main Street between the intersection of Wibaux Street and First Avenue South and down to the intersection of Orgain Avenue, will say when I watched that in the street, the water was catching me with these laced boots, I should judge 16 inches deep in the middle of Wibaux Street.

Q. What time did you go to the lumber yard first, right here?

Mr. McCARTHY: Objected to, not proper cross examination.

The COURT: Of course, he hasn't gone into that. You can examine him to test his recollection about it.

(Testimony of J. D. Cullen.)

I got to the lumber yard between half past 5:00 and 6:00. There was no water on Main Street at that time and there was no water going through the viaduct at that time; I don't know what time the water started going through the viaduct, well, I would say about 20 minutes after,—about 6:00 o'clock I would say. Like some of the witnesses, I wasn't paying much attention to time, [384] but I would say it was a quarter after 7:00 when I started from the lumber yard with the neckyoke, to get out of there towards Main Street, and as I progressed from the lumber yard right here, up towards Pickering's pool hall, or between Pickering's pool hall and the Orgain store here, the water was attempting to pull me towards the viaduct, but I was going the other way.

Q. Now, when you got past the intersection of Orgain and Wibaux Streets, was the current as strong going north on Wibaux Street as it was going north, at the intersection of Orgain and Wibaux Streets and the lumber yard?

A. I would like to answer that my own way: well, the current at the door—that lumber yard represented there is 20 feet back from Main Street. The water coming up Orgain Avenue, coming west there, was rushing by the door, and there is a big window in the south—I could see out through there, and it was coming up through against the building and down past the corner and towards the viaduct. I couldn't trust myself to step out in that

(Testimony of J. D. Cullen.)

current (I am past 21), and when I got to the middle of the street, I told the two men helping me, I says, "Go ahead boys, I can take care of myself." Out there, it wasn't as strong.

Redirect Examination:

When I walked up to the pool hall, to the building I got on top of, there was water on Main Street at that time. I would say it was 16 inches deep at the time they left me at the intersection of Orgain and Wibaux Streets. If you are talking about Wibaux—Main Street, between the building I got up on and the Pickering pool hall, there was water on Main Street or Wibaux Street at that time. The Pickering pool hall is at the corner of Orgain and Wibaux Streets, northeast corner of the block,—it would be the southwest corner of the intersection. The building I got up on top of was located on the west side of Wibaux Street, and about three-fourths of the way between Orgain Avenue and [385] First Avenue South—the second building from the south end—The building at the intersection of First Avenue South and Main Street, at the northwest corner, is the Sawyer store, and the building next to it is the building I finally landed on top of; that is the small building immediately to the north of the Sawyer building—at that time. The building has since burned down. The open space immediately to the north of the Sawyer store shows where the building was that I got up on—

(Testimony of J. D. Cullen.)

where it is—the one I got onto had been removed; I went up on one building and over to another. As I walked south on Wibaux Street from the Pickering pool hall to get to the building I finally got up on, there was water on Main Street at that time. As to how deep it was—what the length of time was I started to tell. It started out 16 inches when the boys left me at the intersection of Orgain and Wibaux Streets; before I could get to the building I got on top of, the water was catching me up here perhaps 14 inches higher than it was before I started. That water I encountered after leaving the Pickering pool hall was going north towards the viaduct.

Recross Examination:

I didn't see any wall of water coming down that morning over the town of Wibaux,—that is as I saw.

EDWARD SHERMAN BAER,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

My full name is Edward Sherman Baer. I live at Streator, Illinois. My business at the present time is civil engineering and superintending of brick factory and sewer pipe factory. I studied engineering in the University of Wisconsin.

(Testimony of Edward Sherman Baer.)

I held an official position in the State of Montana in the [386] year 1907; I was County Surveyor of Dawson County. At that time, Dawson County embraced the Town of Wibaux. I was ordered or directed by the Board of County Commissioners of Dawson County to prepare plans for a highway bridge across the creek at Wibaux. That was the first bridge that was put in there to my knowledge—the first bridge that went in. As to whether I complied with the order and designed a bridge, will say that I wrote out general specifications for the length of span for a steel bridge to be built on concrete abutments. The bridge was built. In regard to how many years that same bridge I designed stood there, will say that I wasn't there when it went out; I understand it went out in June, 1929. It was there from December, 1907, until the time it went out. As to what study I had made of water conditions that that bridge would have to meet before I made my specifications for the bridge,—how I determined how big a bridge I would want,—I inquired at Wibaux as to the high-water marks and I was directed to Mr. Tommy Rush who lived in the Massey place. I went up to his house and he showed me the highest mark he seen at the creek. I drove stakes, cross-sectioned the creek, and determined the fall, and computed the cross-section, and designed a bridge capable of taking care of any water in the creek that came down in Wibaux

(Testimony of Edward Sherman Baer.)

prior to that time. I have refreshed my recollection as to the plans of the bridge since that time.

It was testified to here yesterday that the area under the bridge for water was 920 square feet; that is practically correct. * I did not make plans for any spillway for any water east or west of the county bridge. I was familiar with the railroad bridge that was in place at that time.

Q. It was testified to here yesterday that the waterway under the railway bridge was 1190 square feet (we will contend it was somewhat larger), but assuming it was 1190 square feet of waterway under the railway bridge, why did you provide 920 under the county [387] bridge?

A. Mine provided a cross section sufficient to take care of Beaver Creek proper. It is evident from the cross section which was taken at the Massey place. Applying my knowledge of engineering to the situation, I designed a bridge that was considered ample and adequate.

Cross Examination:

(By Mr. Maury).

Q. There was a spillway to the east of your bridge, was there not?

A. There was a road that led to Beach, which was lower ground, yes. I think there was lower ground for 700 or 800 feet there. I never ran levels across there to determine how much lower that ground was than the floor of my bridge. We

(Testimony of Edward Sherman Baer.)

were asked to build the floor of that bridge level with the intersection of First Avenue South and Wibaux Street. I guess there isn't much change now. As to whether that was filled ground, will state that I think the whole townsite of Wibaux was made-ground.

Q. Have you anything here that shows the outlines of your bridge?

A. Yes, sir. * I haven't those plans. I didn't help to prepare this plan (having been shown defendant's exhibit Y-4). I have looked it over before. To the best of my knowledge, it is correct. Under my bridge there is practically an area of 920 square feet.

Q. Does that include the little triangle in the bottom or not?

A. It included a complete cross section of what was there at that time. Whether it included this triangle in the bottom,—I don't recall just what it included and I don't recall that the area was the same as the specified bridge, but I do recall that it was what was supposed to be there. I do not know, I am sure, whether there was an area of 2230 feet left for water to flow over that land to the east of my bridge. There was a large area there.

Q. Always there? Were there any buildings when you placed the county bridge in the region here of this sidewalk? Have there [388] ever been so far as you know?

A. I don't think there were any there when the bridge was——

(Testimony of Edward Sherman Baer.)

Q. No. You never saw any.

A. The elevators were there though, however. I don't remember the location of this elevator, whether it was on the east side of the railway or not; I remember driving by and——

I don't know a thing about flood conditions after 1907 there, except what I have heard here in court and at Baker. I built the bridge and my duties were completed. I left Montana in 1914. I was last in Wibaux in 1914 on business. I have been there in the last year, since this case came up. I don't know anything about flood conditions after the bridge was built.

Redirect Examination:

Q. Mr. Baer, what have you to say with reference to the Board of County Commissioners having plans for a road running to the east of the county bridge at the time you designed the bridge?

Mr. MAURY: Objected to as not material. The plans themselves, if they were actually in existence and written down, they might be shown here. Too indefinite; too remote. It might be in the mind of the county commissioners or in the mind of somebody else.

The COURT: If he has any distinct recollection of what he did or what he was instructed to do.

Q. With the qualifications suggested by the Court, will you answer the question?

A. I believe that First Avenue South was opened at that time. I believe the County of Dawson bought a right-of-way across there for First Avenue South,

(Testimony of Edward Sherman Baer.)

and paid something for a right-of-way, and I know it was the intention to build a road across there, to the east. In building the road, of course the road would run both sides of the county bridge; it had to cross the county bridge. That road, I presume it was to go to the end—to the county line, which was at Yates, or some place there. [389]

Recross Examination:

Later on, I think they did build a road across there. I don't know whether or not they built it some 8 feet below the floor of my bridge. As to whether they built the road lower for a distance of 800 or 900 feet, will say that I examined the profile relative to the bridge,—not relative to the road, and I don't know anything about it.

Q. They did build the road for 800 or 900 feet much lower than the floor of your bridge?

A. That may go in the record as your testimony—not mine.

Q. You are an engineer. Now, if exhibit Y-4 is correct, Mr. Baer, the county did build a road for a distance of 700 or 800 feet, below the level of the floor of your bridge?

A. If the profile is correct as exhibited, the profile shows that condition.

JAMES C. STARK,

being first duly sworn as a witness in behalf of the defendant, testified:

(Testimony of James C. Stark.)

Direct Examination:

(By Mr. Hall).

My name is James C. Stark. I live at Mandan, North Dakota. My business or profession is civil engineering. I graduated as a civil engineer in 1923; have been practicing my profession ever since.

On June 6th and 7th, 1929—or on June 6th, 1929—I was working in Beach, North Dakota. That is about 10 or 15 miles east of Wibaux, Montana. I had occasion on the 6th,—or the 7th of June—to make a trip to Wibaux.

Q. How did you come to make that trip, and on which day?

A. Oh, hearing about the flood conditions in Wibaux, we went over to see the sights. We went by car—automobile. We arrived in Wibaux between 1:00 and 2:00 o'clock in the afternoon. We stopped our car east of the elevators, on the high ground. [390] We couldn't go on into town on account of the water. I got out of the car and stood there and took a general view of the surrounding country west of us, and we walked over to the Northern Pacific railroad track and down along the railroad track to the first washout; the first washout was east of the bridge. At that place it was washed out underneath the track; the track was suspended in the air; it was held up by the bolts. I didn't cross over that and go on into town. When I got to just east of the bridge and as to whether I observed the extent of the water in Beaver Creek at that time,—well, as far as you

(Testimony of James C. Stark.)

could see was water. Looking along the railway track, the distance east that the water extended then,—east, it was across those tracks leading down into the elevators—water still over the elevator track. Looking south of the depot or the right-of-way, it extended west as far as the high ground on the west. So that whole country was covered with water at that time. The piers and the abutments of the bridge were standing. As to whether or not any of the embankment had been washed out on either side of the abutments at that time, will say that east of the pier had washed out about 100 feet. I would say there was less than 100 feet of the embankment washed out to the west,—about 75 feet, so at the time I got there at 3:00 in the afternoon, there was 100 feet washed out on the east side and 75 feet on the west. From where I was I couldn't see so that I could tell whether any had been washed out at the viaduct at that time. As the water flowed through there where the embankment had washed on either side of the bridge it had the appearance of going over a falls or rapids.

Defendant's exhibit Y-29 represents a scene that I saw there while standing on the bridge, from the position where I was standing east on the embankment, east of the bridge, and looking southwest towards the water tower; it represents a picture with the camera up here (indicating on model) somewhere. [391]

Mr. HALL: We offer that (Y-29*).

Mr. MAURY: No objection.

(Testimony of James C. Stark.)

The camera was at the lefthand side of this (pointing on model) facing from some point on the railroad embankment over towards the water tower, and that shows the suspended rails between the embankments where it had washed out 100 feet west over towards the bridge; I said it was something like a waterfall or cataract from here over to the abutment. I couldn't tell what it was that caused that drop in the water at that time.

I was back there again the next day, after the water went down. With reference to whether defendant's exhibit Y-30 correctly shows the condition of the washout under the track east of the bridge, these underpinning went out, but so far as the track is concerned, and the ground, it is the same thing.

Mr. HALL: We offer that (Y-30).

The rock alongside the embankment there is what gave the water this appearance as in Y-29, my attention having been called to exhibit Y-30.

Q. The rock underneath the track there. When the bank washed out this picture shows it did not wash down to the level of the stream and the water went over the bank like a fall?

A. Yes.

Mr. MAURY: Objected to as leading.

The COURT: Yes, it is leading. But he has gone over that; he testified to it once.

Y-28 represents the condition of the track west of the bridge, except that some supports are out.

Mr. HALL: We offer that (Y-28) in evidence.

Mr. MAURY: No objection.

(Testimony of James C. Stark.)

As to the condition of the rock underneath the track, that picture shows rock that is there left on the south side of the railroad track, underneath the suspended track. On water flowing from the south to the north that would give it a waterfall or rapids effect [392] in there.

I stated that on the 7th I didn't attempt to cross over the suspended rails; people did go over,—there was quite a few passed over it. I don't know whether or not the rails were suspended over the viaduct. I stated I was there the next day; they were still suspended. I couldn't exactly locate the viaduct from where I was standing on the 7th, but there was people down the track as far as I could see; there were lots of people on the track there by the depot. I said I got there between 1:00 and 2:00 on the 7th. I was there three hours I imagine. When I left the water was going down; it was gone down considerable before I left. As to what the condition of the ground was at the time I left there—say from the spur track over to the lumber yard—there was still water in the spur track for the lumber yard, but it had gone down some from the time I first came.

Cross Examination:

(By Mr. Maury).

I didn't take these pictures; that were just shown me; I just looked at them. I said I didn't know why that on exhibit Y-29 had the appearance of a waterfall. I wasn't familiar with the country; I

(Testimony of James C. Stark.)

didn't know what was underneath there. I imagine there was about a foot and a half difference in water level elevation between the north and south side when I first saw it. As to whether the drop occurred right at the fill, will say that just as soon as it passed that rough edge, it dropped right down and went out in normal condition again. At that time, I did not know what caused it; the next day I seen what caused it; that rock on that embankment there caused it.

Q. The rock? Now, a back-up of water could cause it, couldn't it?

Mr. McCARTHY: Objected to as speculative, if the Court please.

The COURT: You may inquire whether backing up of water [393] might have caused it. He is qualified as an expert.

Q. Would it have caused it?

A. No. Under those conditions, it wouldn't.

Q. Would the backing up of water there at the bridge and the fill, where it was too narrow to hold the water, cause it?

A. The water wouldn't drop off all of a sudden and flow off just normally—not off a place like that.

Q. Not when it was down to about nothing, would it Stark? When the difference in elevation was approaching nothing, Mr. Stark?

A. The water was going down, but there was water there every place you could see around the town.

(Testimony of James C. Stark.)

I didn't measure the break-out or the break-down of the fill on the east side; I am simply giving an estimate. I didn't measure on the west side. I didn't get there before either one of them was gone; I think they were both completely gone before I arrived. I just seen this picture Y-29 here a few minutes ago; it was longer than three years afterwards. The first time after that that I saw this picture was—1929?—this is 1934; that is this year. That was the first time I saw it. This represents the scene just as I saw it—just as I got there—just as I saw it first.

ANDREW PAULSON,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. Hall).

My name is Andrew Paulson. I live in Wibaux, and have been since 1911. I am an auto mechanic at the Wibaux Machine and Auto Company. I was in Wibaux in 1921 when they had some high water. In 1921 I lived southeast of the water tank, up at one of these houses. That is the Kinney house you are pointing to; anyway, I lived in a house there close to the water tank; this is the house I lived in—the first house west of the Kinney house toward the [394] water tower. There was another

(Testimony of Andrew Paulson.)

house close there, what we call the yellow house. That was right southwest of my house; that would be down this way. The water didn't get into my house in 1921. I couldn't say, I don't know, whether it got into the yellow house there. I think the yellow house was slightly lower than my house, I couldn't say how much,—maybe a couple feet, maybe not that much.

I was also in Wibaux in 1929. At that time I lived west of Drake's store. This (indicating) is my house right here, on the northwest corner of the block, lying south of First Avenue South and west of Wibaux Street. On the morning of June 7, 1929, at my usual time, I woke up about half past 5:00 and started the fire, put the coffee on, then back to bed and laid down a while again. I got up about 15 after 6:00 and got ready for breakfast, and after I got washed, then I heard the water splash and I didn't pay much attention to it, I thought it was just a team going by on the street; then the Mrs. looked out the door and she says, "Look at all the water in the yard," and about that time Sam Austin came along and he says, "You better get out; the creek is coming up,"—at least I thought that is what he said. So I went outside and looked to see what it was, and the Mrs. come out, and we looked up the creek and just then, we seen the yellow house lift off its foundation and it seemed like it just stopped in that block. As to whether it stopped between my house and

(Testimony of Andrew Paulson.)

the barn, will say it stopped right in here (indicating). There is a sidewalk there and it ran up against that and that is the last we seen of the house, and we went in the house and was going to get the kids and get out, but before we got the kids ready—well, I don't know what time it was then—but when I got out and was trying to get across,—and I had the kids all ready,—and was trying to get across, I stepped out and the water reached me about up to here (indicating to the top of his coat [395] pocket, right under his arm). I should judge that was about four feet. I stepped out the door the east side of my house; that would be towards Wibaux Street. I had four children to get ready and I stepped out with one of the children. There used to be a sidewalk there at the east door, but it floated away; that wasn't there when I stepped out. That is the reason I went down in the water so deep. That water was flowing north. Then, after I found it was so deep there,—well, I seen I couldn't get across; there was no way to get out of there; I might have got out if I had only one child, but I didn't want to leave the rest of them and I went back in the house again. The water was pretty high in the house at that time; it got up over the stove and killed the fire in the stove, and we got up on top of the stove to keep out of it as much as possible. I left the doors of the house open. I left them open because I figured the house wouldn't be so apt to float away. I had a door on the south side and I left the door open on the east side. The water seemed

(Testimony of Andrew Paulson.)

to be flowing into the south door and out the east door. We all got on the stove. Nobody called to rescue us. I had a "visitor"—I had a cow come in the east door of the room and swim out again. The highest the water got was right up to my arms while I was standing on the stove. The children were on the warming closet—on the warming oven on the back of the stove. I think it was half past 1:00 when I got down off of that stove. I said the water was up to my armpits when I was standing on the stove—just about four feet, something like that. I observed the water on E Street; E Street runs north and south, that is just west of my building. I observed the water on that street—well, as long as we could see it. That water was flowing north, I couldn't say how fast. I had a watch that morning; it stopped at 12 minutes past 7:00. I figured my watch stopped when I stepped off the porch that first time,—when I stepped off on the east side there. It is [396] the watch I got here now.

Cross Examination:

(By Mr. Colton).

I couldn't say how deep the water was in the swale,—I wasn't in the swale. This building I was in was a wooden building. When I stepped out of the door and up to here, the sidewalk that was supposed to be there had been washed away at that time, and I stepped down into the place where the sidewalk usually stood. I didn't hear any rumbling noise of water before I got up; I just heard some-

(Testimony of Andrew Paulson.)

thing like a team walking through the water. When I first got up, nothing unusual attracted my attention, then I slept until 6:15. When I heard water spashing at that time, that was the first indication to me there was any flood. Counsel asked me about the water all moving north. The water was not moving all directions, not by my house it wasn't. After the flood, I did not see any objects that was carried west or carried east. I seen the shingles up by the Catholic church up here, but I didn't see them go up there; I knew they were there after the flood; I presume they were carried there by the flood, I seen them up there. As to whether there was quite a stream of water down to the west of my house, down the swale, will say that it came about the same time—the water in my yard and the water west of my house. That is pretty hard to tell, how much the water rose after my watch stopped,—Well, the water was up to here on me (indicating), and I figured my watch stopped before then, and the water in my house wasn't over my knees at that time and it was that much higher on the outside, so it must have raised from my knees up to here,—I should judge two and a half to three feet maybe. All those houses stood here in 1929, all from the water tower across over here; those houses are mostly frame buildings,—wood,—frame buildings sitting on the ground.

Q. When you first stepped out of your house and water was up to [397] here, the watch stopped?

(Testimony of Andrew Paulson.)

A. You will have to get a watchmaker to tell that,—how long it can run in water; I don't know how long it can run in water. That was the time it stopped—after I stepped out of the house in water trying to get to the sidewalk, and when I stepped out here (the point you have indicated), that was 12 minutes after 7:00.

Redirect Examination:

The first time my watch got wet was when I stepped out of the east side of the house. * I knew the watch was running before that. I said when I was in the house trying to get my child out, the water was up to my knees on the floor of the house, and I got up on the stove; the stove would be a standard height kitchen stove; and as I say, I then got up on top of the stove, and the height that the water got on my body on the stove, was right under here—under my armpits, and so it was up there and then on the stove. I suppose the stove was around two feet high; it was an ordinary cook stove.

Recross Examination:

It was after my watch stopped that I got on the cook stove. We didn't get on the stove until after the water was over it. As to how much the water raised after I got on the stove, it raised right up to here (indicating).

Mr. McCARTHY: Witness indicating a line from armpit to armpit, which he previously has indicated as being four feet in height.

(Testimony of W. M. Combes.)

Mr. MAURY: Q. How high did it rise on you on the stove, approximately? (Witness indicating; Mr. Maury measuring).

Mr. MAURY: 3 feet 11 inches.

A. That is what I said: four feet I should judge.

W. M. COMBES,

being first duly sworn as a witness in behalf of the defendant, testified: [398]

Direct Examination:

(By Mr. Jameson).

My name is W. M. Combes. I live at Sidney, Montana. I am in business in Sidney and am also an aviator. I was in Sidney the morning of June 7, 1929. I was called between 3:00 and 4:00 in the morning at Sidney to go on a special trip and that trip took me over the territory between south of Glendive and between Glendive and Baker over Cedar Creek, and during the trip it also took me over Wibaux going east, or going east and then coming back west. I made this trip by airplane. I passed over Wibaux going east between the hour of 9:00 and 10:00. I took almost a direct course from Glendive to Wibaux. Glendive is northwest of Wibaux and I was flying to the southeast, but I was flying on the north side of the railway track all the way across on account of the wind that day, and when I came over the divide which is out about four miles west of Wibaux, which is approximately

(Testimony of W. M. Combes.)

1,000 feet higher than what it is in Glendive; I was flying at 1,000 feet altitude and possibly a mile or a little over a mile north of the railroad track, and when I came to the straight road—there is a straight wagon-road leading out about four miles, something like that, east and west, from Wibaux, and I was practically over this wagon-road, that is north of the railroad track, flying east. Of course, that was my errand; that was the reason of this special trip—it was due to high water—that was the reason I was flying that day, 200 or 250 miles of that territory. The course that I took over the town of Wibaux, I came just almost over the school-house on the north side of the track; that is a large building in the northwest part of town, sitting up on the high ground. When I first sighted Wibaux—not of Wibaux but of the valley—I was 12 or 14 miles before I got to Wibaux, when I first sighted the valley due to the elevation between Glendive and Wibaux, and then when I got to the divide—to this road—the end [399] of the four-mile road going east and west, then the main highway turns south approximately one mile. Of course, I was familiar with this road—I didn't pay any attention to the railroad or anything else. The low country was all covered with water or all the depressions were, but I had sighted this river back about 12 or 14 miles on the north side of town. When I came over this road, I knew I must be getting close to the town of Wibaux; I was on the blind part of

(Testimony of W. M. Combes.)

the ship and blind part of the town. When I came to this road going east and west on the north side of town, I knew I must be getting close to Wibaux and I varied my ship so I could get a view of the town; I was about a mile and a half out of the town. I was up about 1,000 feet; I wanted to see what was going on and I dropped my altitude and flew down to probably 50 to 100 feet of the water just between the schoolhouse and—well, between the schoolhouse and the viaduct, that was the lowest point, between that and going in front of the depot—that was the closest to the water, I might have been about 50 or 100 feet; I came close to the schoolhouse. The town was practically all flooded. There was a very large number of people standing on the track between the schoolhouse and the depot and also in front of the depot; they were down this way a little farther,—closer to the viaduct there; they were standing along in there and in front of the depot—that is where these people were standing, and in coming down, when you get down close to the surface, of course, you just get a very rapid, quick view of what is in front of you in that time, unless you pick out something special to look at,—because flying down from the altitude where I was,—the altitude I attained close to above the trees and the water, I was going a rapid pace; you get speed you see, coming down from the altitude, you gain speed you see. The water was all through the town, both north and south. Using the

(Testimony of W. M. Combes.)

pointer to indicate just where the water was,—the water was all through the viaduct and [400] the hotel building (pointing to building); that was the only building I was acquainted with in the town. Of course, it was within a few—I thought at the time it was within 18 inches of the top of the door. Of course, that way when I went back to Glendive and this part of town was all under water, otherwise, the people were standing along close to this place and in front of the depot; in front of the depot was where the people had congregated. In this space opposite the hotel, along the track here, and this territory was all under water here. It was up when I came through; this represents the church here and the water was up close to this bank. I am describing the territory now north of the railroad track. Here is that schoolhouse I came down past; here is the line of flight I came. I was one mile north and I came down on an angle past the schoolhouse; that would be very near a southeasterly direction across the schoolhouse. North of the track the water was very wide; it was better than half a mile wide in places and in places, wider than that; it varied according to the height of the ground. As I say, when you get down close, you don't have the view as when up high. The southerly part of town and territory immediately to the south of Wibaux was all under water. It was probably a half a mile or better, wide right close to town there,—it looked to be. As I came over the

(Testimony of W. M. Combes.)

hill I could see on the north,—before I got to the hill west of Wibaux, I could see the river much farther at first on the north than I could to the south, because the river leaves the place in a north-easterly direction from Wibaux, and I was looking down the river, then up it. I could see it possibly 18 or 20 miles. As to the condition of the water for that distance, it looked like a very wide stream and that is what impressed me—it was a river instead of a creek; it looked to me like the Yellowstone or the Missouri—I don't mean the Yellowstone down around Billings, I mean the Yellowstone [401] between Sidney and where it empties into the Missouri, and the territory between Williston and where the Fort Peck dam is located. I had flown over this territory many times before. The creek is very crooked, in normal times you can only see the water when you get directly over it; you can only see the water where you are looking lengthwise of the creek and not across it,—I mean in normal times,—and the morning of June 7th it was practically a straight stream; it was spread possibly some places one mile or more and some places a little less than that, but I should judge, as far as I could get a description of the width of it, the average was between a quarter and a half a mile wide, and you could get the width of it very distinctly from two to five miles distance, and of course, you can see it farther than that. As to whether during that entire distance, it appeared to

(Testimony of W. M. Combes.)

be a quarter to a half a mile wide, will say that there appeared to be practically no difference in the width. It was moving very fast. You could distinguish the flotation in the stream; particularly in high waters the flotation moves very rapidly, and of course, you always distinguish it by the stationary objects. I mean by flotation, the forms—tumbleweeds that collect, and the trees and the objects that are floating in a swollen stream. That water on the morning of June 7th was flowing north. It was moving very rapidly; that pertains to the stream for the whole distance that I have described. It was a very large stream north of the railroad track. You couldn't tell scarcely any difference between the north and the south as far as the stream was concerned, only when you get over the town you are unable to see as far north as south, because the river changes its course and flows a northeasterly direction. Northeast of the town the water was practically the same width and flowing the same way and the same speed as it was south of the track. [402]

Cross Examination:

(By Mr. Maury).

My machine was not equipped for flying blind. I had to keep my eye on the equipment and steering gear in driving my machine and you have to on a blind-flying machine also. I certainly understand what is meant by "flying blind".

Q. You wouldn't pretend to say that your sight of the height of water in Wibaux was anything

(Testimony of W. M. Combes.)

nearly as accurate as Mr. Oien's measurements of water marks made within the month or so afterwards,—following?

I don't know what measurements were made. I wouldn't think at all that my estimate of how high the water was in Wibaux on the north or the south side of the track, and the width on the north or the south side, was nearly or anywhere near as accurate as a civil engineer's measurements of marks made a month afterwards: you can't estimate with the eye as accurately as with an instrument. As I was telling you,—as I came down, I had to steer more carefully because I might get too low and might hit something. I wouldn't be positive, but it was between 9:00 and 10:00, when I got there, after the time I left Sidney. I didn't leave Sidney at 9:00; I was called between 3:00 and 4:00 in the morning.

Q. Your's was not the first airplane that went over about 5:00 o'clock and woke up Edith Jones and Massey?

A. It was reported to me there was another plane. I was not over there at that time; I went over between 9:00 and 10:00. Another plane was reported to me; all I know is what was reported.

When I looked over Wibaux there, I would estimate that the water was between 18 inches and two feet of the top of the doorway of the Milton Hotel, because that was the only place I was personally acquainted with outside of the field I had been

(Testimony of W. M. Combes.)

landing on east of the town. The hotel I mention is the Milton Hotel fronting on Orgain Avenue. I didn't notice whether there [403] were people on top of buildings or not, because when you are flying, you don't notice small objects unless your attention is drawn particularly to them. But I did notice there was a lake from the region of the stockyards clear across to the Catholic church; the reason I noticed that is because our landing field is just south of the stockyards. It wasn't covered, it is upon the hill. I knew from my vision that the town was badly flooded, I could see,—it was. I could get a vision all up the valley—if this model were extended as far as the brick building over there (across the street) on the model,—and all up that valley, between 9:00 and 10:00 on the morning of June 7th, it resembled the Yellowstone River at Sidney, during high water. The width of that River at Sidney—the one I have in mind, it varies, less than a quarter to a half a mile wide. It is very deep in places; in narrow places it is very deep; at other places it isn't so deep. The shallower places are far wider,—sometimes one mile wide; it gets more than that. It (Beaver Creek) is called a creek, but it was a “river” that morning. I don't know the United States Government's distinction between a river and a creek.

Q. The United States Government's distinction—that a river is a stream that drains 100 square miles or more, and less than that for drainage area

(Testimony of W. M. Combes.)

is a creek. Were you speaking of that definition?

A. No. I was speaking from the appearance.

At least for 18 to 20 miles to the south, upstream from Wibaux, there was a volume of water coming towards Wibaux that I make as a fair comparison as of the Yellowstone River at Sidney. Don't get that I saw that river when I was flying down close to Wibaux. I would say that it went upstream in that volume for at least 20 miles,—well, you can get a good observation from two to approximately five miles in viewing it, and your view is estimated on the way it diminishes in size in distance. I could see [404] the river 18 miles south of Wibaux, between 9:00 and 10:00 in the morning. As to whether it was out of the banks all the way down except where it struck exceptionally wide places, will say that it was just the same as any other high, wide stream; it would vary in direction there, but it was out of the banks, that is, taking a different course than what the creek took or the water,—I had ever seen the water in the creek take. From general appearance to the eye, I would say that that river between 9:00 and 10:00 on the morning of June 7th, was just as big 18 or 20 miles south of Wibaux as it was close here to Massey's ranch. I couldn't see any tributaries—side coulees—of that river flowing high—not that I noticed; as far as I noticed, it made no impression. I said that was the highest I had ever seen that river. I did not see that river equally as high about 2:00 o'clock June 7th. At that time, I was down in the Cedar

(Testimony of W. M. Combes.)

Creek gas fields. I saw it later in the day than 9:00, and later than 10:00; I saw it between the hours of 11:00 and 12:00. It was running very swift then. As to how high it was then, you couldn't tell very much difference in it at that time than the hour I went over it before. At that time, I crossed—I was going west about one mile south of the depot, we would say about here (indicating) about one mile south of the depot, and I was flying at a much higher altitude, so I could get a better view—long-distance view. At 11:00 o'clock in the day the river 18 to 20 miles south looked equally as high as at 10:00, and that was June 7th, between the hours of 10:00 and 11:00.

BERNARD BLUM,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

My name is Bernard Blum, reside at St. Paul, and I am a civil engineer. I am connected with the Northern Pacific Railway. [405] Have been connected with that company 27 years. I have been here in the courtroom this last week listening to the testimony in this case. I heard the testimony of Mr. Sutherland as to a meeting between officials and citizens of Wibaux and Mr. Rapelje in 1922, and also heard the testimony of Mr. Cullen with ref-

(Testimony of Bernard Blum.)

erence to that same meeting. I was present at that meeting.

Q. Will you tell the court and jury—I don't suppose possibly you can tell it word for word what took place there—but give it to us as near as you can what was said, in substance what was said by people of Wibaux there and what was said by Mr. Rapelje?

A. We arrived at Wibaux one April morning in 1922 on a special train, stopped at Wibaux, got out and met a delegation of citizens in accordance with request that we meet with Mr. Rapelje. Discussion was had about depot construction; the matter had been talked of previously. Mr. Rapelje informed the delegation that conditions were such that we couldn't consider building it at that time. Furthermore, the depot construction was involved with the replacement of the so-called viaduct or bridge over Wibaux Street. That matter appeared to be settled to the satisfaction of the committee and then the delegation brought up the question of the conditions at the undercrossing of Wibaux Street and the railroad track; there was complaint about the drainage. It was then in the spring; the ground as I recall, was wet. We all went down on the ground under the bridge and found mud, and discussed it, and we assured the citizens that the matter would be taken care of by repairing the sidewalk with cinders and a stringer and doing a little grading up and ditching. The question of a permanent subway was also discussed at some length

(Testimony of Bernard Blum.)

as I recall it, at the time the viaduct was built, it was with the understanding that a permanent structure would replace the temporary pile bridge when the condition of the pile bridge was such that replacement must be made. I am now speaking of the bridge—the pile bridge—at the crossing [406] of Wibaux Street and the Northern Pacific main track; it has been referred to at this trial as the viaduct. I speak of it as the “pile bridge”, and it has also been referred to as “viaduct”,—anyway, it is the structure at Wibaux or Main Street that I am talking about. The attention of the committee was called that the head-room or the vertical clearance from the surface of the street to the underside of the stringer supporting the track was such that with the construction of a permanent bridge it would be desirable to increase that head-room, and on account of additional space required for construction to support the track, it would be necessary to raise the track a substantial amount in order to place a permanent bridge. Mr. Rapelje told them that the condition of the bridge was such that we should not be called upon at that time to replace it, but that we would keep the matter in mind and take care of it as soon as possible. When I used the word “bridge” just then, I am referring only to the bridge or viaduct over Wibaux Street. We were standing first at the meeting, at the west end of the depot platform adjacent to the bridge; we had repaired at that time to the street under the viaduct,—that was Wibaux Street; so when this con-

(Testimony of Bernard Blum.)

versation took place, we were standing on Wibaux Street right underneath the so-called viaduct or bridge across Wibaux Street. That matter appeared satisfactory to the committee, and then one of the citizens said that there was another matter that they desired to take up, and that was the condition opposite the high school, which is on the north side of the Northern Pacific track and about two blocks I think, possibly three blocks, west of the depot. Wibaux is a water station—Northern Pacific—and at that time, practically all freight trains stopped at Wibaux for water. This resulted in eastbound trains standing opposite the schoolhouse and at the time that the children were going to or from the school, it blocked their passageway across the tracks [407] and it had not been infrequent for children to cross underneath the cars. The railroad was requested to do something to relieve that condition and we discussed the matter of a foot-subway,——

Q. Now, we won't go into the details about the subway up there Mr. Blum. What if anything was said by the citizens of Wibaux or by Mr. Rapelje with reference to lengthening—what if anything, was said with reference to lengthening the bridge over Beaver Creek?

A. No reference was made to the bridge structure over Beaver Creek except as I recall it, it was brought to the attention of the committee that when we should build the permanent structure over Wibaux Street, it would necessitate raising the track structure in the vicinity of Wibaux Street and the depot, which raising would have to be carried east

(Testimony of Bernard Blum.)

of Beaver Creek and that would require raising the bridge over Beaver Creek, which indicated the extent of the project in cost and construction of the permanent bridge over Wibaux Street.

Cross Examination:

(By Mr. Maury).

I call the viaduct a "bridge". After the meeting was over that day, I went up to where the children's viaduct is now. It is my recollection that Mr. Stevens was with me when I went up there. I do not recall that Mr. Paul Fisher, a banker at Wibaux, went with me; I am quite certain that he didn't. Mr. Stevens at that time, was chief engineer of the Northern Pacific. To my recollection he went alone, but the meeting was over when he went up there. I do not recall that any others of our party went to the place where that children's viaduct is now with some of the citizens of Wibaux.

Q. Would you say that none of them went up there and pointed out where they wanted this little viaduct for the children to go through?

A. It is my recollection that they didn't because it wasn't necessary on account of the natural depression at that [408] place, which we could see from the track at the west end of the depot—from where we were standing when we discussed the matter.

Q. That natural depression was a swale or slough?

A. I wouldn't call it a swale. A swale, to me,

(Testimony of Bernard Blum.)

means a natural depression in the ground and a slough is a continuous depression in the form of a watercourse that is usually wet,—that has water in it.

Q. Now, as to the viaduct here, (we will call that “viaduct” all the way through with your permission, and not a “bridge”).

A. Yes.

Q. What was said about that viaduct by Rapelje or Stevens or you, in Rapelje’s presence?

A. I don’t remember that anything more substantial was said than what I have already stated. We examined the condition of the bridge to come to some conclusion as to the time about which it would be replaced. It was stated, possibly I am repeating—that our general plans were for that bridge, were the same as any other timber structure on the line,—to replace it in permanent form at the time the building was necessary and the money was available.

Q. Did you not say that plans were already in existence, or did not Rapelje say there, or Stevens,—one of the three of you—that plans were already in existence for raising that track by the viaduct and placing in a new concrete viaduct?

A. I think I may say that no such statement could have been made, because we had no plans at that time for a permanent structure at that place.

Q. Did you say, or was anything said about raising the level of the track all the way from a point up here about opposite the elevators to the opposite hillside?

(Testimony of Bernard Blum.)

A. A general statement was made that it would be necessary to raise the track in constructing a permanent bridge at that place; that was brought out as one of the elements of cost necessary in a permanent bridge and, therefore, the construction of a permanent bridge at that place was a far more expensive proposition than would obtain in the construction of 4-span pile bridge. [409]

Q. Was it not said that the element of expense would enter into the river bridge?

A. It was said that the expense of raising the river bridge was a part of the expense of raising the track, yes, sir. That conversation as near as I can tell you, and by having refreshed my memory from records that I have, was the forepart of April, 1922. The new concrete viaduct placed at this point on Main or Wibaux Street, was started in the late summer of 1929 and completed in the fall of 1929. That is correct,—seven years elapsed between the time that Rapelje and I suggested that that change would be made there and from the time that work commenced on it; work was not commenced on it until after the June 7, 1929, flood. I spoke of this viaduct being muddy the day I went there,—there was a little mud underneath it where the people walked on the easterly side of Wibaux Street.

Q. And there was complaint that it was muddy?

A. There was complaint made; that is one of the reasons we went to Wibaux. As to whether I know that water had shortly before that, flowed from the swale into the viaduct,—will say that I

(Testimony of Bernard Blum.)

know there had been some water underneath the viaduct, but I don't know that it came from the so-called swale or slough.

I was a witness in Baker some two and a half years ago in a case involving the flood of June 7, 1929. As to whether I made the answer bracketed here (Transcript on Appeal, Heckaman v. Northern Pacific Ry. Co., page 839), will say that these are not my exact words, but I presume they are substantially what I said; it is in narrative form; it is not a direct transcription of my remarks. By narrative form, I mean something that a court reporter takes and reduces from question and answer, in his own words, to what a witness says.

Q. In the witness' own words.

A. Well, I don't know how—just how he does that. Reading what I said at that trial:

“On occasions when there would be water in the slough or [410] swale then the viaduct would act as a spillway for that water; and it so acted from 1912 until June 7th, 1929,—anyway—whenver there was high water; whenever high water was coming down to the swale.”

Yes, sir; in other words, that is a general statement that an opening there would act as a waterway in case water got up that high, and of course that is self-evidently correct.

Q. And by records kept by the Northern Pacific, you understood that water had gotten up that high——

Mr. McCARTHY: Objected to as not proper cross examination.

(Testimony of Bernard Blum.)

Mr. MAURY: I hadn't finished the question.

The COURT: If you want to make him your witness, put him on.

Mr. MAURY: We may in rebuttal.

I know a man named W. C. Sloan. Mr. Sloan was a member of the Rapelje party on that day.

Q. Mr. Sloan was at three trials at Baker?.

A. Yes, he was at three trials at Baker, but I think testified only at two trials—the first and third. Mr. Sloan is not in Billings at this time; he is on the high seas.

Testimony of

W. C. SLOAN,

who had been first duly sworn as a witness in behalf of the defendant at the trial of Case No. 2444, Wibaux Realty Company, a corporation, (and other cases) vs. Northern Pacific Railway Company a corporation, in the District Court of the Sixteenth Judicial District of the State of Montana, in and for the County of Fallon, at Baker, Montana, on the 15th day of January, 1934, was read at this time by Mr. Jameson, as follows:

“Direct Examination by Mr. McCarthy:

My name is W. C. Sloan. I live at Seattle, Washington, and I am General Manager of the Northern Pacific Railway. I have been connected with the Northern Pacific Railway Company twenty- [411]

(Testimony of W. C. Sloan.)

five years, this coming April,—first of April. In 1921, the position that I held with the company was Division Superintendent of the Yellowstone Division, with headquarters at Glendive, Montana. Wibaux, Montana, was included in the Yellowstone Division at that time.

I recall an occasion while I was Superintendent of the Yellowstone Division, of Mr. Rapelje and a party of railway officials meeting with some of the people of Wibaux; that was in the spring of 1922 I believe. At that time, Mr. Rapelje was Operating Vice-President of the Railway. I was present at that meeting. The subject of discussion, as I recall it, was principally an opening for the school children at the high school and the question of drainage under the underpass used by vehicles across the street; that is the underpass at Main or Wibaux Street immediately west of the depot. There was nothing said that I know of, at that meeting regarding the lengthening, widening, altering, or in any way changing the bridge of the railway company over Beaver Creek. I was with Mr. Rapelje all of the time, I was there all of the time that he was talking with the people of Wibaux; in fact, was with him. I ceased to be Superintendent of the Yellowstone Division in the spring of 1924,—so that from 1921 to the spring of 1924, I was Superintendent of the Yellowstone Division all of that time,—from November, 1920, until the spring of 1924; there was no part of that time—those four years, approximately—that I was not Superintendent.

(Testimony of W. C. Sloan.)

Q. Now, Mr. Sloan, you may tell the court and jury whether any time during the four years of your superintendency of the Yellowstone Division, you were asked either by letter, verbally, or in any manner,—whether you received any request from Wibaux or the people of Wibaux, the Mayor or the Council, or anybody connected with it, the Commercial Club, or anyone else, to lengthen, widen, alter, or in any manner change the bridge over Beaver Creek? [412]

A. I did not receive any such request.”

Mr. JAMESON: Did you want to read the cross-examination?

Mr. MAURY: I will read the cross-examination:

“Cross Examination by Mr. Maury:

“At the last trial of these cases I was here during a portion of the time,—or similar cases—I was here during a portion of the last trial and most all of the trial before Mr. Maury. I don’t believe I heard Mr. Joe D. Cullen testify here last September or October. I am not positive of that Mr. Maury, that he was brought here as a witness for the railway; I understand he was.

Q. Do you recall, Mr. Sloan, Mr. Cullen’s testifying that, “In the meantime, the party was”——

Mr. McCARTHY: I suggest you let him read it; let him read all of Mr. Cullen’s testimony.

A. I did not hear Mr. Cullen testify.

Q. You did not? Was it brought to your attention that Mr. Cullen—I mean by the counsel for

(Testimony of W. C. Sloan.)

the railway—during the last trial, that Mr. Cullen had testified that, in answer to a question: “Was there anything said Mr. Cullen, with reference to lengthening the bridge over Beaver Creek?” (pg. 371, Case No. 2438, etc.), and he answered: “Not as to lengthening it. That was one of the items of expense that he mentioned in connection with the making of this viaduct.”——

A. I read Mr. Cullen’s testimony.

Q. Just a moment. “My recollection is, he said: ‘We will have to build a new bridge down there after we raise this track four or five feet.’” Was it brought to your attention?

A. I read Mr. Cullen’s testimony; yes, sir. As to whether that was brought to my attention, will say I have read it in his testimony. I did not take the stand during the last trial. How many days I was here? Oh, I don’t know; I think about probably three or four; maybe it was four or five, Mr. Maury. [413]

The replacing of the timber structure over Main Street with a concrete structure was discussed at that meeting. As to when, according to my best recollection, that conversation was wherein Mr. Rapelje and myself, and Mr. Cullen and some other citizens of Wibaux were discussing it, will say that the meeting took place, as I remember it, in the spring of 1922. I have not tried to consult any official or any memorandum that I made in the nature of a diary or something else, to determine the exact date of that meeting; I have seen some

(Testimony of W. C. Sloan.)

of the correspondence. I have seen Mr. Rapelje's report to Mr. Donnelly and such files as we have. By a concrete viaduct, I mean a viaduct such as exists there now—practically so. That was placed there in 1929, I believe,—after June 7th,—after the old viaduct was badly injured. I think that was June 7th. I was in Wibaux soon after June 7, 1929; I couldn't tell you what date—probably four or five days, or six days after the high water.

Q. Were you there in 1921? Soon after June 21st?

A. Yes, sir."

Mr. MAURY: And there were some objections. Is there anything further here except objections and arguments to the Court?

Mr. JAMESON: I don't know; I didn't read it all.

“Redirect Examination by Mr. McCarthy:

(Mr. Maury reading).

Q. Mr. Sloan, in Mr. Cullen's testimony there, there is a reference there that counsel has called to your attention. If the viaduct was put in in 1921, what if anything, would have had to have been done with reference to the rails east and west of the viaduct for some distance?

A. Well, the plan was to raise that sag. It had been there for a good many years, Mr. McCarthy; and the permanent structure was contemplated at a higher elevation to give not only head-room, but to raise the sag in the street. And Mr. Rapelje told

(Testimony of W. C. Sloan.)

them at that time that this wooden structure was going to be carried [414] for its life and when they rebuilt or raised it in connection with its permanent form, that it would be done in connection with the track-raise through there. That track-raise would cover probably, on the west, a matter of a quarter of a mile and on the east, considerable more than that—probably half a mile.”

“Recross Examination by Mr. Maury:

That track-raise on the east would carry it past the bridge, I don't know exactly what distance past the bridge; I would say approximately 1,000 or 1,200 feet. You see, that is right in a sag, Mr. Maury, and it would be leveled across there. As to what, or how much of a track-raise was discussed at that time, I don't remember of any specific track-raise being discussed, but we always planned to raise it five or six feet through there. As to whether I mentioned that we had plans already made to raise it five or six feet, will state that Mr. Rapelje said there were plans to raise htat sag. It was objectionable for our passenger train-stops also; it wasn't difficult; it was objectionable; in fact, the railway company could operate better on a less grade there—that is it.

Q. Was it discussed that it would be raised five feet and that there were plans to raise it five feet?

A. The exact raise may have been mentioned, but I don't remember that. I know the question of raising the track and raising the depot and all.—I cannot tell you positively whether or not at that

(Testimony of W. C. Sloan.)

time, the company prepared plans to raise the track five feet,—but I doubt it.

Q. But “plans”, to a superintendent of a railroad, has two meanings of the word; one meaning is a purpose of the management, and the other drawings and specifications made by engineers, are there not? You use the word in two meanings?

A. Do you mean specific plans drawn or contemplated,—or ideas,— [415] is that what you mean?

Q. Yes, sir.

A. There were ideas to raise that sag, yes, sir—no question about that.

Q. I am speaking of the words that you gentlemen use. You may use the word “plan” to denote a purpose?

A. That is true.

Q. And you use the word “plan” to denote what drafts have been made by engineers for future construction work, do you not?

A. That is true.”

J. T. DERRIG,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

My name is J. T. Derrig. I am employed by the Northern Pacific Railway Company; have been

(Testimony of J. T. Derrig.)

connected with that company 27 years. I knew Mr. Rapelje, whose name has been connected with the Northern Pacific Railway Company, from 1906 to the time of his death—about 20 years; Mr. Rapelje is now dead. I am very familiar with his signature. Having been shown defendant's exhibit J and my attention called to the signature on page 5, that signature is Mr. J. M. Rapelje's. The stamp on page 1 is the stamp of the President's Office, indicating the date on which the letter was received in the President's Office,—the President of the Northern Pacific Railway Company. I have seen this letter before; I have seen the letter in the President's Office and also obtained it from the President's Office. I heard the testimony of Mr. Sloan just read by Mr. Jameson, in which he refers to having read the report of Mr. Rapelje to Mr. Donnelly, the President of the Northern Pacific; defendant's "J" is the report referred to.

Mr. McCARTHY: Defendant's "J" is offered in evidence.

Mr. MAURY: We object as hearsay and having no bearing [416] upon this case—

Mr. McCARTHY: Pardon me, just a minute. I will withdraw the offer temporarily.

Q. Mr. Derrig, do you know what the practice of Mr. Rapelje was when he was out on the Line with reference to making reports to the President?

A. He made reports of his work or investigations that he made immediately following—usually

(Testimony of J. T. Derrig.)

those reports were written the evening following the day's work, and those reports were made in the regular course of railroad business; defendant's "J" is such a report.

Mr. McCARTHY: Now, we offer defendant's "J" in evidence.

Mr. MAURY: We make exactly the same objection and in exactly the same words that the counsel for the railway made to the city records of Wibaux—that it is hearsay; that it is silent as to the bridge at Wibaux—has no reference to it; that it is a matter *inter alios*, and merely has a tendency to encumber the case with useless stuff not competent, nor relevant nor material. I think you will find, your Honor, that it has no reference to the bridge at Wibaux.

(Jury retired) (Argued by counsel)

The COURT: This has been identified as a statement or report prepared by Mr. Rapelje himself at that time, and I think I will admit it for the purpose of showing what he said and did there and for what it may be worth along that line. It refers particularly to that meeting and his presence there, and he is dead and gone and there is no way of contradicting his testimony or knowing what he did say except by that identified report. I will admit it for the purpose only—that portion of the report which refers to the meeting at Wibaux.

Mr. McCARTHY: May it be understood that this may be received as an exhibit and the reporter

(Testimony of J. T. Derrig.)

substitute a correct [417] copy of it and the original may be returned to us?

Mr. MAURY: We except to the Court's ruling.

Mr. JAMESON: I am skipping over to the part that refers to the meeting at Wibaux and reading the part pertaining to Wibaux: (reading)

“DEFT'S. EXHIBIT ‘J’ ”

No. 2438 9/29-33

“President's

File 542 A-69

Northern Pacific

Office of the

Apr 11 1922

President

Railway Company

“On Line, at Billings,

April 9th, 1922-rg.

Mr. Charles Donnelly,

President.

* * * * *

I received a telegram from the Mayor at Wibaux asking if we would stop and meet a delegation there, to which I replied that I would be glad to do so. On arrival there we met the Mayor and eight or ten citizens. I expected, of course, that they wanted a new depot also, as the question of a new depot at Wibaux was up during Federal Control. The situation at Wibaux is bad, although there is no reason why they cannot get along there for a year or two

(Testimony of J. T. Derrig.)

without any inconveniences or hardships. The committee expressed themselves that they did not expect a new depot and were not going to ask for it. I told them that we had the matter of a depot for Wibaux in mind from the fact that it had been brought up before, but the situation at Wibaux was a very difficult one and one that would take some study and probably cost a lot of money to work out a satisfactory and permanent arrangement, and that we were not considering that at this time.

The main reason for wanting to meet the railroad officers was on account of the bad condition under our overhead bridge immediately west of the depot. The situation is not serious; the drainage is not good, and the place was quite muddy on one side. With Mr. Stevens, Mr. Blum and Mr. Sloan, we worked out a plan of taking care of the drainage so that the road could be rounded up and no doubt will be satisfactory for the present. This is simply a matter of digging a little ditch and cleaning out [418] near the end bents of the bridge; two or three men can do this in half a day.

Another point that they brought up was the question of a subway or crossing under our tracks west of the depot and opposite the school house. The school house is on the north side of the track; a large majority of the children live on the south side and have to cross our tracks. Practically all east-bound freight trains stop at Wibaux for water, and

(Testimony of J. T. Derrig.)

when they stop for that purpose, the rear end of the train extends over the crossing, and when trains happen to be stopping there during the time the children are coming and going (and this happens frequently) the children crawl under the train unless the trainmen stop them from doing it. We have so few trains now that all of our trainmen are old employes and know all about the situation and they watch the matter very closely, at the same time, the little ones do occasionally crawl under the train despite this fact. Of course, there is always danger, even when there are no trains standing there, of a train coming along and catching the children as they cross the track. I did not promise the Committee anything on this but told them I would look at it when I went by, which I did, and I am having an AFE prepared to put in a little opening under the track so that the children can get through without crossing over the tracks. This probably can be done for three or four hundred dollars. AFE will be submitted as soon as it is prepared.

* * * *

J. M. RAPELJE."

The letters AFE in the report refer to Authority for Expenditure. This exhibit, as counsel read it, "On Line, at Billings"—the words "On Line" indicate that the letter was written On Line, at Billings. Mr. Rapelje's office was in St. Paul. The practice of an official would be that he would write

(Testimony of J. T. Derrig.)

that letter on his business car when he got in at night. If he was in his office, [419] the letter would be headed "St. Paul", and if he wrote it on the Line, it would be dated at the station he was at and "On Line."

Cross Examination:

(By Mr. Maury).

Mr. Rapelje might refer to "plans" as visual plans, or know that the bridge had to be raised four or five feet. It would not necessarily mean we had detailed plans for the construction of a bridge prepared.

Q. Now, do you know whether he had in mind plans for the raising of that bridge here at the date of the conversation?

A. I would say Mr. Rapelje, in referring to "plans", he would refer to plans and probably a profile of the Division, he would know that it would be necessary to raise the bridge. In my work I didn't report to Mr. Rapelje direct, but I knew him in a business way and had contact with him. I have rode over the line with him on business trips and knew him personally, and in connection with my construction work out in Montana. He was a man that did not use useless words.

Q. And if those plans were already in St. Paul for raising that track seven years before it was done, there was no use on earth about Rapelje writing about the plans——

A. I happen to know the plans were not prepared.

(Testimony of J. T. Derrig.)

Q. What did the testimony mean when Sloan said: "We spoke of plans for raising the track and raising the bridge?" What was being talked about?

A. He may have in mind plans,—visual plans, of repairing the bridge.

Q. Sloan is just as competent business man as Rapelje?

A. Yes, sir.

Q. When he spoke of plans, and said it in his testimony at Baker, he knew what he was talking about?

A. I didn't understand he said detailed plans.

Q. He said there were plans mentioned at that conversation?

Mr. HALL: We object; that isn't in his testimony. [420]

Mr. MAURY: Yes, it was.

The COURT: That is quite important. You better locate it. See just what he did say about that.

Q. You heard Mr. Sloan testify at Baker. I am talking about the General Superintendent of the railroad, Sloan. You heard him answer: "Well, the plan was to raise that sag. It had been there for a good many years, and the permanent structure was contemplated at a higher elevation to give not only head-room, but to raise the sag in the street. And Mr. Rapelje told them at that time that this wooden structure was going to be carried for its life and when they rebuilt or raised it in

(Testimony of J. T. Derrig.)

connection with its permanent form, that it would be done in connection with the track-raise through there.” You heard Sloan testify about that?

A. Yes, sir.

Q. He is a good business man?

A. Yes, sir.

Q. And “that track-raise would cover probably, on the west, a matter of a quarter of a mile and on the east, considerable more than that—probably half a mile.” You heard him say that?

A. Certainly. A half a mile east of this viaduct is way beyond the railroad bridge.

Q. And now you heard him speak of plans——

A. I beg to differ with you; that word is “plan”.

Q. And wasn’t Sloan asked this question: “And did you mention that you had plans already made to raise it five or six feet?” He was asked that?

A. Yes, sir.

Q. And didn’t Mr. Sloan say at the other trial: “Mr. Rapelje said there were plans to raise that sag.”

Redirect Examination:

Q. Mr. Derrig, does the railway company, or officials thereof, frequently have projects in mind for which there are no plans?

Mr. MAURY: Objected to as repetition.

The COURT: I think that has been gone over, Mr. McCarthy. [421]

Q. Was there a plan to build an extension from the Redwater branch all the way to Lewistown?

(Testimony of J. T. Derrig.)

A. Yes, sir.

Mr. MAURY: Objected to as entirely outside the issues.

The COURT: Sustained.

JOHN OIEN,

called as a witness in behalf of the defendant, testified:

Direct Examination

(By Mr. McCarthy).

In connection with the surveys to which I have already testified in connection with the examination at Wibaux and vicinity, I examined Beaver Creek and the country to the south of Wibaux. As to what the average width of Beaver Creek is between the banks where the banks are clearly defined, will say that where the banks are well defined and the creek fairly straight,—no erosion going on, so to speak, the width is from 65 to 70 feet. As to the character of the volume of water ordinarily that passes down Beaver Creek,—low-water, there is very little, just a trickle.

Q. Mr. Oien, this relief map here has been received in evidence and it has been referred to, and the engineer for the plaintiff here has accepted it. You heard Mr. Lyman's comments on it, did you?

A. Yes, sir. Now, he criticized the map at the vicinity of the county bridge. I have examined this

(Testimony of John Oien.)

relief map at the point indicated; I have checked the map. I made a cross section of First Avenue South; that is already in evidence here. The relief map corresponds with the cross section introduced in evidence by the plaintiff but which cross section was originally prepared by me, as closely as can possibly be. The measurements contained on that exhibit Y-4, cross section that has been introduced in evidence, of First Avenue South, were checked by both Mr. Lyman and me. I went down into Wibaux with Mr. Lyman and the two [422] of us checked on the figures on that exhibit together; Mr. Lyman was satisfied it was a correct section. Reference has been made to the road east of the county bridge, at least there has been an intimation that the road was lower to the east of the county bridge. The fact is, it is a depression across there, but the road is carried on the fill across the depression. I don't know about the conditions prior to the 1929 flood,—as to the road being on the natural surface of the ground or otherwise; I wasn't there. The bridge was a little higher than the road.

Q. Do you know whether the fact that the bridge was higher than the road was due to the fact that the bridge had been built up higher or whether the road had been scooped out to the east?

A. No, the road wasn't scooped out; the bridge was built up. There is an official designation for that road—the Red Trail. I wouldn't say it is now a part of the Yellowstone Trail; it connects with the

(Testimony of John Oien.)

Yellowstone Trail; it is a through-road. The surface of that road is a gravel-scoria.

Q. Graveled road? Can you give us any idea how high that road is?

Mr. MAURY: We would suggest that is evidence of what has been done there long after June 7, 1929.

A. I don't know as it is. I didn't understand that is what you were referring to.

Mr. McCARTHY: I was trying to get at it prior to the flood.

Mr. MAURY: Mr. Oien says he doesn't know anything about it.

Q. Do you know whether or not before the flood the roadway east of the bridge had been scooped out or the bridge was simply higher than the road and that accounted for the raise.

A. My impression is that the bridge was higher than the road shortly after the flood and you could see traces of it. From the marks I could see there, the height of the road above the natural elevation I should say was a couple feet.

This relief map was prepared from surveys and contour maps [423] made under my direction, actually by me; I have checked the map carefully.

Q. Calling your attention Mr. Oien, to the relief map and particularly to the road which you have said was the Red Trail road east of the county bridge, and to a point about six inches on the map directly to the east of the easterly end of the county bridge, there is a white mark on the north side of

(Testimony of John Oien.)

the road and a white mark on the south side of the road. What do those marks indicate?

A. They indicate two lines of culverts. This mark to which you are pointing, which is located approximately eight and a half inches to directly south of the southerly side of the county bridge is the point where the water line is carried across the creek; it is covered up with dirt and things; the water pipe was covered up with dirt and things. A portion of the water that came from the raised sidewalk and the low land between the raised sidewalk and the elevator would pass through the culverts that I referred to; they are 24-inch corrugated iron pipes—two of them.

Defendant's exhibit Y-31 is a cross section taken about 3000 feet south of the Main Line. That was prepared from a survey that I made, and the exhibit was prepared under my direction. It is correct in all respects.

Mr. McCARTHY: Defendant's Y-31 is offered in evidence.

Mr. MAURY: No objection.

I made a cross section of Beaver Creek immediately to the south of the bank—between the banks of Beaver Creek between the city water tank and the green house, and I made a cross section in the vicinity of the Massey ranch. Those cross sections have been checked and prepared by me and they are presented in graphic form. These cross sections have been prepared more as of a permanent nature

(Testimony of John Oien.)

—they are a wooden outline. The two cross sections to which I have just referred—the exhibits just set up here—are the defendant's exhibits marked defendant's exhibit D-17 and [424] defendant's exhibit D-18, and they correctly show the cross-sections and the elevations that are marked thereon.

Mr. McCARTHY: Defendant's D-17 and D-18 are offered in evidence.

Cross Examination

(By Mr. Maury).

D-18 is a cross section taken at the foot of E Street; on the model, it is right there; that is east of the water tower.

Mr. HALL: It runs north and south on E Street, across the street.

Q. Oh, this cross section runs north and south?

A. Yes. The distance on the model that it runs is from the top of the bank in here (pointing) and over to here (pointing), going straight north and south. It has on it "low-water"; as to whether I took low water at sometime for that, will state that that is the elevation of the water at the time I took the section. I think it was in 1931, April, that I made the measurement for this cross-section D-18. I wouldn't say that the water was higher then than I have seen it in the stream. The depth of the water at the point marked "low water" was about two feet. I have seen the water that deep (as indicated on finger).

(Testimony of John Oien.)

Mr. McCARTHY: By "this deep" what do you mean?

Mr. MAURY: Indicating the last joint on the left index finger of counsel for the plaintiff.* * * *

Q. And you have seen it less than one inch?

A. That is about 2 feet.

Q. You have seen it less than one inch?

A. Right there?

Q. You have seen it less than one inch other places then?

A. Yes; other places. This blue color is given to designate the stream there or the water. At the time this measurement was taken, the width of the creek there (witness measuring on exhibit) was about 70 feet or 72 feet. I have seen the creek this wide (as indicated by you). [425]

Mr. McCARTHY: By "this wide" you mean?

Mr. MAURY: A step of less than three feet.

The width there where I took this cross section, from bank to bank,—from this point to point,—about 72 feet. You mean from top of bank to top of bank? That distance was (witness measuring), about 85 feet.

Mr. MAURY: No objection as to D-18.

The COURT: Very well; it may be received in evidence.

D-17 is a cross section taken at Mr. Massey's ranch. The words "low water" here,—that is the elevation of the water at the time I took the section; I took that in June of 1933 I think. That was not

(Testimony of John Oien.)

at a time of exceptional high water there. The width of the creek at that time that I took it (witness measuring) was 56 feet from low-water line to low-water line there (pointing). It was three feet deep at its deepest point where I took it that day. As to whether I have seen it at that point frequently where a man could step across it, will state that I don't know about that particular point, but I have seen it in that vicinity right close to there.

Q. And you have seen it often so a man could step across it and not more than one inch deep?

A. Well, it was more than one inch there—probably two or three or four inches. The width of the banks there at that point (witness measuring) is about 78 feet.

JUROR: Q. How far is that?

A. 78 feet.

Mr. MAURY: I think any one of the jurors in Federal Court can ask questions?

The COURT: Oh, yes.

Mr. MAURY: Can ask a witness or engineer or anyone, questions. Don't hesitate to ask questions that you want to know the answers to (speaking to jurors).

The blue, of course, represents the water.

Q. Where was the model, or whatever you choose to call it—profile—[426] running to this height here that my finger is? Top of cow shed?

A. The section was taken right over the top of the cow shed. The top of the cow shed is in corre-

(Testimony of John Oien.)

spondence with the top of this model. As to whether the cow shed is right down to the level of the ground that has been described as the three or four acres by Tom Rush or the level of the banks there by Massey's, will say that it is practically the level of the bank there. The section was taken across this point here over the cow shed.

Mr. McCARTHY: Q. Running from the cow shed shown on the relief map, in what direction?

A. In a southwesterly direction, at right angles to the stream.

Q. So that if you prolonged the section of the stream, it would extend from the cow barn to the southerly edge of the relief map and to a point about how many inches to the west of the intersection of the stream line and the edge of the map?

A. Oh, about two or three inches.

As to the distance it would be across that cross section from the elevation of the bank at the cow shed until you get equal elevation on the opposite side of the creek in the direction where the cross section runs, I think that would be outside the limits of the map; it would be 800 or 900 feet.

Q. Now, the profile of this model crosses the stream at right angles—at an angle of 45 degrees when would you approach and where would you get to an elevation equal to the top of the cow shed that is in the bank?

A. Oh, you couldn't measure it on the relief map; it is too small to measure those conditions. I

(Testimony of John Oien.)

haven't notes where that point would be; I haven't got it there.

Mr. MAURY: The defendant's exhibit D-17 may be admitted.

The COURT: It may be received in evidence—both of them.

(By Mr. McCarthy).

Q. While you are there, Mr. Oien, calling your attention to defendant's D-18 first—the one down there half way between the [427] green house and the city water tank, there is a legend on here "Ground Line at Top of Bank", what bank does that refer to? Can you point out on the relief map?

A. It is the north bank of Beaver Creek in here, approximately half way between the green house and the city water tank. Then, as you notice, that the cross section from the side where the legend is "Ground Line at Top of Bank" then makes a sharp dip, then extends parallel with the table, and then slopes down again, that indicates the ground line of the bank. So that if we stood at the bank, we would see that it run just in this direction,—in the manner indicated on the cross section. Now, there are certain elevations on here—6 feet, 4 feet and 2 feet,—that is the distance above the water line; and the water at low-water, is shown on the exhibit in blue color on cardboard. Now, the heights to which I have referred, located directly above the word "North" and the arrows indicating 6 feet, 4 feet and 2 feet, indicate, with reference to the water line,

(Testimony of John Oien.)

the height above the low-water mark. The bottom of the creek bed is shown; that is right in here (pointing); the bottom of the creek bed is so designated on the exhibit. The height of this bank above the bottom of the creek bed (witness measuring) is about 9 feet. The scale of this cross section is one-half inch equals one foot—I will check that again—eight and one-half foot, about. Taking it over here, right above the arrow indicating just to the right of the wall, at this point here, the height above, the creek bank there is $7\frac{3}{4}$ foot above the bed of the creek. The word “North” and the arrow indicates the compass direction.

Q. Now, calling your attention to defendant's D-17, calling your attention first to the cardboard that has been colored here, Mr. Oien, what does that blue color on the cross section show?

A. The dark blue color is the water in the creek at the time the section was taken; it is designated here on the exhibit as “low [428] water”. The light-blue color indicates the high water of June 7, 1929. On the left hand side of the cross section on the wooden part, is the legend “Top of cow shed”, that is the cow shed of Mr. Massey's that has been referred to frequently here in the trial. The floor of the cow shed, that is right in here; it is so marked on the exhibit; then I have the top of the cow shed according to the exhibit, is also the ground line at the top of the bank on that exhibit; and then the scale in feet is shown there. Explaining the con-

(Testimony of John Oien.)

tour of the bank at the place of the cow shed, this is the ground line and it drops clear down on the face of the cow shed and this is the creek bottom (pointing). The scale at this point indicates 14 feet plus—That is the distance above the low-water line.

Q. And that difference in 14 feet is what? 14 feet, what?

A. About $\frac{3}{4}$ foot. The high water of June 7, 1929, I said was indicated in the light-blue color and the top of the cardboard represents the extreme height, and it is so marked on the exhibit; and the low water is also marked, and the creek bed is designated; and the scale is marked—the scale is on there.

Q. Now, Mr. Oien, can you give us the elevation of the intersection of Wibaux Street and First Avenue South?

Mr. MAURY: The plaintiff's property?

Mr. McCARTHY: Yes. Well, that is not his property, of course; it is a city street.

A. The elevation of the street 2635.

There has been received in evidence here a picture of a wall at the old Wibaux ranchhouse—Pierre Wibaux house—My attention having been called to plaintiff's exhibit "1" and particularly to the pencil cross-mark located about half way on the picture between the picture of a man standing at the end of the bridge and the telegraph pole; I can spot the wall of the Wibaux ranchhouse on that picture. This (pointing out on the relief map) is [429] the Wibaux ranchhouse and this is the wall.

(Testimony of John Oien.)

Mr. McCARTHY: The witness indicating the house immediately south of Orgain and west of the blue stream indicating the Beaver Creek, which is north of First Avenue South.

The retaining wall is located with reference to the house, straight east, and it is shown by a line running north and south and then two wings thereof. The ground elevation at the retaining wall, that is the retaining wall directly east of the Pierre Wibaux ranchhouse,—in front of the stone wall, that is on the east side, the elevation is 2626.7. The height of that wall on the east side, the top of the wall is at an elevation of 2631.6; the wall is about 5 feet high. The elevation of Wibaux Street directly west of the retaining wall is 2635.4, then the difference in elevation between the top of the retaining wall and the elevation of Wibaux Street, a point directly west of the retaining wall is 3.8 feet. The elevation of the floor in the Wagner store is 2635.9. As to the high-water marks of June 7, 1929, in the Wagner store,—well, it was pointed out by Mr. Wagner; he didn't have any marks on the wall or anything like that; I talked with Mr. Wagner in the store and he pointed it out. The elevation in the Wagner store on June 7, 1929, was 2640.1.

On the relief map there is a dotted black line commencing on the easterly side of the relief map and south of the Red Trail road, which line extends diagonally across a portion of the relief map so that it comes along on the northerly side of

(Testimony of John Oien.)

Esther Avenue extending into the creek bed and then running—turning at right angles and running directly across the foot bridge immediately to the east of the county bridge and extending on across Beaver Creek until it gets to a point in line, approximately in line or just north of the northerly side of Orgain Avenue, at which point the line turns at right angles and extends west in a straight line north of Orgain Avenue,—that is the property line [430] of the Northern Pacific. So that the ground on which the foot bridge, or at least half of the foot bridge, the Woodburn building so-called, the elevators, stockyards and all buildings contained therein,—all of the property referred to is located on Northern Pacific Railway Company land. And then the black line on the north side of the map, dotted, running across the entire length of the relief map and located four inches to the north of the railroad main line indicates the Northern Pacific Railway Company property line on the north side of the main line.

That is a depression in the ground,—my attention having been called to a depression on the southerly side of the railroad embankment between Wibaux or Main Street, and “C” Street,—the low mark immediately south of the railroad embankment.

(Recess until 1:30 P. M., March 31, 1934.)

Mr. McCARTHY: Mr. Maury, I don't know as I entered an exception * to the refusal to put in the Government Army Report of Dyke.

(Testimony of John Oien.)

My attention having been directed to plaintiff's exhibit "1", with particular reference to the wall in the vicinity of the old Pierre Wibaux home as more particularly indicated or exhibited by the pencil mark, cross-mark, about half way between the figure of the man and the telephone pole pictured in the exhibit, I should estimate that $2\frac{1}{2}$ to 3 feet of the wall is exposed above the water; the wall is 5 feet high. So that on that old picture then, the water is only half way up the wall, about.

Cross Examination:

Of course, in a photograph of that nature, where low land is covered with water, unless you get a wall or something to check by, you can't tell whether the water is six inches or six feet. As to how wide on the land to the south of the railroad fill the water stretched in exhibit "1", it was as far as I can see here on the picture. The width that it stretched in [431] feet,—knowing the land, having surveyed it and gone over it—oh, probably 700 or 800 feet; I couldn't tell exactly by the picture. I mean 700 or 800 feet wide. Designating on the model how wide I would place that water as shown in exhibit "1", it would run from the wall over to about in here——

Mr. McCARTHY: Running easterly to the elevator?

A. Yes; you can't see the elevators in the picture.

(Testimony of John Oien.)

I don't know whether the elevators were there at that time or not.

Q. Or if you indicated a line from one of the elevators, where it is now, northerly to a thing called the loading platform?

A. About that; yes, sir. That would be my view of about how wide.

During my direct examination, I spoke of an obstruction in the stream, appearing on the model, called a dam, about 300 feet south of the county bridge. Plaintiff's exhibit X-10 may be a picture of that obstruction, looking towards the north. As far as I can tell, where the man is standing in the picture is the obstruction that is portrayed.

Mr. MAURY: We offer in evidence X-10 (plaintiffs).

The COURT: Very well.

That was called the "manure dam"—by somebody. It is rock and dirt and stuff when it was covered; it was rock and dirt around the pipes.

Q. Mr. Oien, can you give us the elevation of the ground between Cramer's house and the next house to it, up here? Do you know where Cramer's house is located that was spoken of, Mr. Oien?

A. No, sir; I do not. I haven't the elevation of the land between that house (the house you are pointing to, called Cramer's) and the embankment here to the south. The closest elevation I have to that is down in here.

(Testimony of John Oien.)

Mr. MAURY: Indicating a corner of Olive Street and Drake Street. That would be your closest elevation?

A. Is this Trollope's house? [432]

Mr. COLTON: This is Ostby's, this is Sletten's and this is Trollope's.

I have no elevation right here (where you have pointed) or anywhere in that neighborhood. I should say, as I recall it, from this house at the corner of Drake and Olive towards these houses here to the southwest, that the ground is practically flat across there. As to whether I gave the elevations across there (where you are pointing), I got it for the contour map. I would have to go and look at that, to give you an approximate elevation here that was used for the contour map. I can—I will try—to produce the elevation of this Cramer house here or something close to it. I don't know where the Paulson house is,—that is described as the house that the man got up on the stove and put his children up on the oven.

Q. Right there. Mr. Colton is pointing to the Paulson house, which is identified. Can you give us an elevation on that, or close to it?

A. I can give you one close to it,—the intersection of "E" Street and First Avenue South? It is 2633.1.

Q. 2633?

A. Yes, sir. That would be 13 feet and point-one, above B. I would not be surprised if Mr. Lyman

(Testimony of John Oien.)

made that 11.1 above B, because of that difference we found in the bed of the stream, taken two years apart.

In taking a cross section at right angles to the stream at Massey's cow barn, I would find, if I had done that on June 7, 1929, much of the water running lengthwise with my cross section. I couldn't do that—that would take a lot of calculation, to give you some proportion of water between what would be running lengthwise and what would be running crosswise on my section there, if I had taken it June 7, 1929.

Q. What is the rate of fall from Massey's place to where you took the cross section, defendant's exhibit D-18, down by Mattie Miller's place * difference in elevation? Can you give us the [433] rate of fall per mile?

A. (Witness figuring) Between the low-water surface at Massey's and the water surface at E Street it is 5.6 feet. The low-water surfaces there for the two were not taken the same day; they were two years apart. The fall of the creek bottom from Massey's to that point where I took the cross section, exhibit D-18, is 4.7 feet. The true difference then would be 4.7 feet in 4,000 feet around meanders there—well, whatever the distance is around the meanders; the true difference would be 4.7 if it is around or approximately 4,000 feet around the meanders from opposite Mattie Miller's to the cross section.

(Testimony of John Oien.)

Q. Now, what is the rate of fall from Mattie Miller's to the county bridge?

A. (Witness figuring) I haven't got the ground line on the county bridge here; it is on that section there.

Q. Is there some exhibit that would help you?

A. Yes; the First Avenue South exhibit (defendant's Y-4). Of course, under the county bridge, it is a deep pot-hole; I can take the water-elevation on the two points. Giving you the water-elevation on the two points there, that would be approximately 7 feet.

Q. 7 feet? And in what distance Mr. Oien?

A. It is probably about——

Q. 1750 feet around the meanders. Has that not been measured before? What distance would you assign on the meanders?

A. It would probably be 800 to 900 feet.

Q. Would you say by that that you intended to cross that big meander there Mr. Oien? I think that you gave me as 1750 feet once. I meant the cross-section, where you took the cross-section D-18?

A. That would be about right—1750, I think. The fall of the stream from the county bridge to the railroad bridge is about $2\frac{1}{2}$ feet, in a distance of about 800 feet.

I said that under the county bridge there was a deep pot-hole; I think it was scoured out. As to when I first noticed that scouring under the pres-

(Testimony of John Oien.)

ent county bridge or under where the old county bridge was, it was when I took the cross section of First [434] Avenue South, and that was, with reference to June 7, 1929, in the fall of 1929, probably September or October sometime.

Q. And Mr. Oien, when a bridge is too short for a stream, does that scour—when it is too short for a stream, does that cause scouring?

Mr. McCARTHY: Objected to as not proper cross-examination.

Mr. MAURY: I will make Mr. Oien our witness.

The COURT: Very well; overrule the objection. Let him answer if he can.

Q. When a bridge is too short for a stream, does that cause scouring?

A. If the velocity is strong enough and the ground does scour, yes. That does cause scouring, if the velocity is strong.

Q. You spoke of this depression east of the old county bridge. You have made exact measurements of that, and using for the cross-section there—Did I mention measurements of the old county bridge as given by Mr. Baer?

Mr. McCARTHY: Objected to as containing something that Mr. Oien didn't say.

Mr. MAURY: I am asking him.

Mr. McCARTHY: No, you are not. You are putting the words into his mouth.

Mr. MAURY: This is cross examination.

(Testimony of John Oien.)

Mr. McCARTHY: It is an improper question. It is three questions in one, Mr. Oien did not say.

The COURT: It assumes a state of facts he didn't testify to. Ask him about it.

Q. Is there a depression east of the old county bridge for a distance of 700 or 800 feet?

A. There is a sag in the road there. As to whether I measured that sag with reference to the floor of the old county bridge, will state that the old county bridge was washed out at that time. I assumed where the old county bridge was; vestiges left on the ground—one of the abutments—[435] caused me to make that assumption. Using that, I measured a depression from the floor of that bridge along the road going to the east as it existed in the early fall of 1929. I never figured the area of that section separately, using as the hypotenuse a line drawn from the top of the floor of the old county bridge.

Q. What are the dimensions? You have it on exhibit Y-4 there. What are the dimensions of that? May I ask? Are these (the black ones) your figures right there?

A. No, sir. If you would give me the points Mr. Maury. Point them out.

Q. Yes. We start at the bridge here. Get in front of the jury; that is the best way to let them know what we are driving at. What is the area between or beneath the black line drawn to the east from the county bridge and the white line beneath it? Have you figured that?

(Testimony of John Oien.)

A. It is marked here—2230 square feet. The distance between the black line and the white line underneath it at the point right where the arrow points down from the word “elevation” (this one here), is 3.2 feet. The lower white line is the surface of the road as it went across there,—not exactly the lower white line—the one next to the black line.

Q. Yes, the other lower white line is much—the white line that we just spoke of goes on top of the road and all those culverts there Mr. Oien?

A. Yes, sir.

Redirect Examination

Having been shown defendant's exhibits D-19, D-20, D-21, and D-22, and asked whether I recognize the scenes portrayed in those pictures,—I recognize this one (D-19); I recognize D-21; and I recognize the scene portrayed in D-22.

Q. And there is no particular object with which you can check defendant's D-20?

Mr. MAURY: Yes; those are various photographs of the manure dam.

Mr. McCARTHY: Of the city dam. [436]

Q. Your attention which has been directed to pictures of the so-called city dam, which Maury calls a manure dam, are the ones which you said had rock and manure on?

A. Yes, sir; they are. They are just larger pictures than the ones that were in evidence.

(Testimony of John Oien.)

Mr. McCARTHY: Defendant's D-19, D-20, D-21 and D-22 are offered in evidence.

Mr. MAURY: No objection.

The COURT: They may be received.

My attention having been called to defendant's exhibit Y-4, there is marked on here the approximate area between the points A and B; the figure given as that area is 920 square feet. And there is given also in black figures, area 2230 square feet; that latter area, the 2230 square feet, relates to the area of the cross section between the points C and D. Adding the two together so that we will have in the record the area of the cross section A to B, plus C to D, it is 3150 square feet.

I have numerous times in the course of my testimony given elevations, all of which were preceded by the figure 26—that is, 2630, 2635, 2640, and so forth,—I was referring to sea-level datum; it is “2640” feet above sea-level for instance. Wibaux is 2600 feet above sea-level, and then some; so then I take the latter two figures to make my comparison; it is 2600-plus in all cases. So that, when I say 2635 and then give another elevation, 2634 or 2638,—to get the difference in elevation I just subtract the smaller last two figures from the larger last two figures.

Recross Examination:

I usually deduct 2620 from my figures to get the difference in elevation from the point under the bridge.

(Testimony of John Oien.)

Redirect Examination:

That datum point is located,—2620 is right under the bridge. [437]

Recross Examination:

As to whether Nick Wagner's place of business is downstream or upstream from the county bridge,—his place is right in here (indicating). His floor was the same elevation as the floor of the old county bridge.

Q. His floor was on the elevation of the old county bridge?

A. Approximately, yes. His floor is almost exactly one foot above the street. [438]

M. F. CLEMENTS,

being first duly sworn as a witness on behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

My name is M. F. Clements. I live at St. Paul, and I am with the Northern Pacific Railway, with the title of Bridge Engineer. I graduated from the University of Iowa in 1899; took a general engineering course. In regard to my experience as an engineer and what specialty of engineering I have followed, the first position I held after leaving school was in Washington, D. C., as a draftsman

(Testimony of M. F. Clements.)

in Civil Service, working for the United States Government. While I was there, I did take an additional year's work in night school, in George Washington University. After leaving there, I worked for the Burlington, Cedar Rapids and Northern Railway as assistant engineer on maintenance of way. That railroad was absorbed by the Rock Island in 1902. I continued with the Chicago, Rock Island and Pacific. For one year I was in maintenance of way work and then followed with two years of designing of bridges in the office of the Bridge Engineer. Later, I went to a field position as assistant division engineer at Cedar Rapids, Iowa. I continued there until 1906. Then I became engineer for the Clinton Bridge & Iron Works. Was there eighteen months, and I came to the Northern Pacific Railway; that was in August 1907. I have been with the Northern Pacific ever since. For about ten years I was on bridge construction; for a few months—for six months—I was on designing of bridges in the office of the Bridge Engineer; and since November, 1917, I have been Bridge Engineer. During the time I was in the field I lived at Superior, Wisconsin; Duluth, Minnesota; Glendive, Montana; Missoula, or Bonner, which is near Missoula; and Spokane, Olympia, Tacoma, Portland, Vancouver, Washington; Seattle; and I was in camp in a number of places in construction work. Practically all [439] of this was in construction of bridges. Perhaps, with some ex-

(Testimony of M. F. Clements.)

ceptions,—one season when I was on some rock work, and tunnels,—practically all of it was bridge construction.

Defining some of these terms we have used here, such as “bridge” and “viaduct”: in our bridge records, all structures that carry, that is, over a road or over a gulch, or over a stream that carries water, we designate—they carry a bridge number, designating each one by a number, which is taken from the mile-post. For instance, Beaver Creek is bridge number 184. That means it is the first bridge in the mile 184; that is 184 miles from Mandan. The next bridge takes 184.1 and the next bridge would be 184.2. Beaver Creek bridge is number 184; Wibaux Street bridge is 184.1; the highschool subway is 184.2. So our bridge record calls those bridges. Now, a structure which may be over a gulch which carries a little water, but which is placed there to eliminate grade or high embankments, we would speak of as a viaduct; and other designations, for instance, if a bridge was over a road or street, we designate that as an undercrossing, having reference to the street; or if the highway or street went over, an overcrossing. Speaking from a railroad standpoint, a culvert is an opening to carry water under the track, which is entirely closed at the top and has filling material over it, where the track structure between the rails and ties has some filling between the culvert opening of the culvert opening of the structure and the tie. A bridge would be

(Testimony of M. F. Clements.)

an open deck structure where the ties are carried directly upon the bridge structure. Reference has been made to a chapter in Webb on Railroad Engineering, which chapter was entitled "Culverts and Minor Bridges." A minor bridge is one which would provide an opening for water from a drainage area of an equal amount. For instance, the Northern Pacific Railway has standard plans of culverts, pipe culverts,—concrete boxes, wooden boxes and wooden culverts. The maximum [440] size of culvert plan we have is a 10 x 10 box, which is about 100 square feet. Supposing an embankment is six feet high, it wouldn't be possible to build a 10 x 10 box, and if we require 100 square feet of area in that culvert, we might put in a bridge. For instance, if we had a 100-foot bridge, beams and steel bridge, the depth of the floor of that bridge would be between two and three feet,—say an I-beam would have a depth of three feet; we would have three feet below; thirty feet long would be ninety square feet. That would be the same opening as the 10 x 10 box, or culvert-box. That is, there is a bridge that carries the same amount of water that a culvert would carry. Getting beyond that, you would have a bridge of major size as compared with a minor bridge. I was acquainted with the bridge over Beaver Creek that was in place there for some years prior to the flood of June 7, 1929. That is not a minor bridge; that would be a major bridge.

(Testimony of M. F. Clements.)

In addition to my work for the Northern Pacific, I have for a period of six or seven years been a consulting engineer for contractors and others occasionally, on bridge engineering—bridge construction. I had some connection with the bridge out at San Francisco or Oakland, California, that is quite an engineering feat; I designed the foundations for the Suisun Bay bridge, now called the Martinez-Benicia. It is a bridge that there is about sixty feet of water and went to a depth of 140 feet, and it is the deepest foundation that has been put down. That bridge was constructed in 1929. That bridge over the Mississippi at New Orleans is under construction now, and I designed the foundations for that. The foundations of the Mississippi River bridge is built after methods which I originated.

As to whether there is kept in my office at St. Paul the records of the various bridges, will state that it has been maintained in the Chief Engineer's office, combined record since 1891, and the same is maintained today. I have caused photostat [441] copies of those records to be made insofar as they relate to the bridge over Beaver Creek. Having examined defendant's exhibits D-23 and D-24, will state that those are photostatic copies of the records of the Northern Pacific, insofar as the bridge over Beaver Creek is concerned. These are what we use as a double page, as they appear in the book—one following the other. I notice in the upper corner here, the printer's record there that this

(Testimony of M. F. Clements.)

form was made the 13th of March, 1891. That has been maintained from that day to this.

Mr. McCARTHY: Defendant's exhibits D-23 and D-24 are offered in evidence. It will take a little time. May I assume they will be in evidence? From the records, Mr. Clements has prepared certain models that we could start unpacking here.

Mr. MAURY: I think we can save more time than that. Mr. Lyman says they may be admitted.

As to the exhibits received in evidence here (D-23 and D-24) I had prepared under my supervision, models of the bridges over Beaver Creek from the time the railroad was built, on up to the time the bridge was built and in place there at the time of the flood of June, 1929. I have those models here. I am prepared to set them up. (Five-minute recess.)

The various parts of the models are numbered or labeled. I will set up the bridges, explaining to the jury as I go along, what was done there, and in my setting up, will then call off for the record, the various parts of the models as they are labeled. The first model I put up represents the bridge that was first constructed over Beaver Creek at Wibaux; it was built in 1880, and the model is made on a scale of four feet equals one inch. If we were to take a section directly across the roadbed at the east end of the Beaver Creek bridge, and another at the west end. One inch on the model represents four feet in actual construction. [442] The bridge is just the same as if I would cut a

(Testimony of M. F. Clements.)

cross-section across the roadbed and was up and down stream. The portion at the end represents the section cut across the embankment, and the slope on the embankment, as it appears on either side and directly in front of the bridge. Now, the two sections are together and extending on the east end, here is a mark on here "east end", and then at the location of each support or bent there is a number called pile bent number 2,—1 being at the abutment,—2, 3, 4, 5, 6, 7, 8 and 9, and then the west abutment. Those are the slots for the pile bent; the slots are numbered in the manner I have indicated, and also each pile bent that goes into it. This bridge was built with four piles in each bent, with sway bracing, on which was built 3 x 10 plank and on top was placed a cap. These piles were driven one at a time, developing a certain carrying capacity for the load that goes on top of it. They are cut off to a level and on top was placed a timber 12 x 12 inches x 14 feet long. Now, each bent is built up in that manner. I might say that the reason for this type of bridge is that each individual member is comparatively light in weight and can be hauled on a wagon. The equipment that is used in the construction of this bridge—the heaviest would be the pile-driver, and that can be hauled. In the construction of this type of bridge,—outside of the pile-driver, is designed nothing but hand-tools. So, it is convenient in the construction of a bridge, where the material has to be hauled long distances, in the building of a railroad.

(Testimony of M. F. Clements.)

Now, that represents the first part of the bridge. I am now duplicating construction conditions when the railroad first came through eastern Montana; in 1880, this type of bridge at Beaver Creek was built. The first track was laid over it in the spring of 1881—along in May. Now, after the bents are in place, what we call stringers are placed on top of that, and then ties across the stringers. These (models of piles and ties) are made up in [443] sections simply for the convenience of putting them together. Now, that represents the bridge that was built in 1880.

Now, after the track had been constructed through to the West Coast so the trains could be operated and long timbers could be obtained in the timber country, there was a section of this bridge removed and what we call a Howe truss span——

Mr. MAURY: Q. You are taking all that from these records,—your translation of these records. You are now giving your translation of exhibit D-24 and exhibit D-23?

A. Yes, sir. That is my translation and I am now giving my translation.

Q. These records are very occult to a layman?

A. That is what I am telling here.

Q. You weren't there. You are giving your interpretation and translation of these records—these exhibits to which I have called attention?

A. Yes, sir.

There were removed three bents in the center of the bridge (witness removed three bents). What

(Testimony of M. F. Clements.)

I have put on there is what we call a pile-and-timber pier. This last section I have put in is what we call the Pony Howe Truss; it had a span-length of 44 feet. As to whether the Howe truss span was a solid piece of material such as that indicates, the lines on the side represent where the members were. The total sections of timber were full-length, 44 or 45 feet long. As I say, this pan was not built until after the bridge was completed, because the long timbers had to be hauled by train from the Coast. That was the bridge as existed in 1884,—four years later. That was put in to provide a wider channel over the stream to eliminate the accumulation of drift and other material that might come down.

Now, then in 1893, there is a record of high-water shown on the diagram of 7.3 below the base of rail. Now, that high-water mark is represented by a yellow wire. That was the highest water [444] up until 1893. The bridge was first built in 1880; that was the first record of any high water.

In 1896, this bridge was replaced by what we call a permanent structure.

Mr. MAURY: Q. Before passing to that, how long was this bridge, Mr. Clements?

A. That bridge was 137 feet long.

On these bases—two of them—there is a mark at right angles to the line of the track on each section; and those are match-marks so that the base of one could be moved past the other. The reason

(Testimony of M. F. Clements.)

for that is that the two bridges were not placed exactly opposite each other. (Witness assembling bridge, abutments and piers). I am inserting what we call a pile-pier down in the slopes at this time,—well, call it pile abutment. Pointing out the distinction in the material used in the abutments and the material used in the piers,—this consisted of a central span 70 feet long; that is, 70 feet from center to center of bearing; and at each end was a 20-foot span, although overall-length was about 21 feet and overall-length was around $71\frac{1}{2}$ feet. 20-foot designation means center to center of bearing. Now, they are supported on the east end and west end by pile piers, that is, piles were driven—three rows of piles—and they were to take the bearing of a steel span. The two piers were concrete, painted gray; they are concrete. And the black portion is the steel, covered by the ties. That was the bridge built in 1896. As to how the bridge of 1896 and the bridge that was in place prior to that time compared in height, will state that the 1896-bridge, or the track, was raised $3\frac{1}{2}$ feet. The reason for that was that the depth of the steel girder was greater than the depth from the floor to the clearance-line of the truss, or timber, bridge; and in placing the steel bridge, the bottom of the main girder was made to the same elevation as the bottom of the Howe truss. That accounts for that $3\frac{1}{2}$ -foot [445] raise,—to provide the same waterway. Now, at the end of the bridge, there

(Testimony of M. F. Clements.)

was a slope on either side that extended in front of the abutment for the reason that there was no wings or other provision made, to retain the slope, and the spans at the end, we designate as slope-spans. The 70-foot span was put in to take the water, but with this type of construction permitting the slope to run around the abutment; it provides additional waterway, simply giving a little increase or leeway on the provision for waterway.

Now, in designing a steel bridge, we take into consideration requirements for a longer time than we would for a timber bridge, because a timber bridge is more or less flexible,—it could be shortened or extended without any difficulty. So, in determining the length of a bridge—its length—we take into consideration all the information that is available, and what is considered the best of all is the record of water that has come to this bridge——

Mr. MAURY: We suggest that that kind of evidence be introduced by question and answer.

Q. I wish, in addition to showing it to the jury, that you comment on it and explain it as we go along——

The COURT: I think so. Can the jury hear? Can you understand clearly what the witness is saying?

Mr. McCARTHY: Anything that isn't clear in the presentation, let them ask Mr. Clements.

Now, the water coming through the Howe truss trestle, water comes in to the piles and around and

(Testimony of M. F. Clements.)

is deflected sideways. So, we consider this in determining the area of the opening available for water, that this pile bent takes out of the opening about three feet.

Q. Now, explain to the court and jury at this point, Mr. Clements, what some of the factors are that you or any bridge engineer, take [446] into consideration in designing a bridge, in determining its size? That is, if you were given the problem of designing a bridge to go over a stream, what are the factors that you would take into consideration, that is, when you came to a bridge, particularly of a permanent character?

A. In the first place, any bridge is designed to carry the load that is to cross it—the locomotive being the heaviest load; and we always look to the future in the designing of any permanent bridge, assuming the weight of a locomotive is greater—oh, 50 to 75% greater than existing locomotives, and also in the assumption of unit stress and design, we consider figures to allow for any increase. And after determining on the type of structure, we take into consideration the source of the water that is going through this bridge, and its location,—whether it is in a country where there is heavy rainfall and whether it is in a country that is subject to acute storms of short duration, and at this territory, it is subject to cloudbursts. The rainfall around Beaver Creek is around fifteen inches a year. On the West Coast we have sixty inches a

(Testimony of M. F. Clements.)

year, and in eastern Washington it is eight inches a year, and the St. Paul country twenty-four inches. But the section where we have sixty inches of rainfall may not be any worse than the one at Wibaux, where we have fifteen inches, because of the acute storms which this country is subject to. So, that is taken into consideration. And we take into consideration the size of the drainage area, the condition of the soil, the material—the ground directly underneath the bridge, as to what velocity of water could be permitted to go through there; or take into consideration every factor that enters into the maintenance of this bridge as a permanent structure.

Now, I started to describe a moment ago what we considered the area of waterway in the pile trestle bridge. Now, assuming the steel bridge, with its long span in the center, comparing [447] them on the basis I have mentioned here, the steel bridge will carry 22% more water than the timber bridge. As to why that is: although, the length of it is only 114 feet and the length of this timber bridge was 137,—as I explained a while ago, taking into consideration the area that is left here available to carry water, I have deducted three feet for each pile bent.

Q. What would be the effect if the pile trestle bridge was in place and you got some high water coming down that, carrying with it debris of various kinds, including pig pens, trees, chicken-coops and outbuildings of that character?

(Testimony of M. F. Clements.)

A. Well, the piles being close together—the standard length of the span at the time this was built, was sixteen feet from center to center of the various bents. The comparison that I make as to the efficiency between the two bridges,—I stated the steel bridge would carry 22% more water than the timber, although the steel bridge is 114 feet long and the timber bridge is 136 feet long.

Proceeding with any construction work: well, in 1898, the Northern Pacific reduced the grade on Beaver Hill, which was west of this point a few miles, and this bridge was located in a sag so far as the railroad was concerned, and the material from the top of the hill was placed in the embankment at either end of the bridge and the bridge was raised a little over five feet. * Now, in raising the bridge, the timber abutments were simply blocked up; the piers were actually raised by adding to the concrete. The abutments were still of timber construction at that stage. The spans were raised, so there was no change in them.

Now, that shows the bridge as it was in 1898. I changed these blocks on the end as representing the slope, for the reason that the slope span was originally designed to take a flatter slope than what would be required for a five-foot higher elevation. The original bridge was about sixteen feet high; the slopes are con- [448] structed $1\frac{1}{2}$ to 1, that is, for each foot of vertical height, it come out $\frac{1}{2}$ foot.

(Testimony of M. F. Clements.)

Q. Before you raised that bridge, did you want to indicate—maybe you did or maybe you didn't—I don't know,—any high-water marks?

A. I didn't; I can. (Witness placing wires on side). That was the high-water of 1893 and also 1897,—which was the same elevation as the high-water on the old bridge. That is, this bridge, as I had it before I raised it, was built in 1896, and there was a high-water in 1897, but it was the same elevation above sea-level as the high-water of 1893, so that is what I assumed. Now, these slopes I was speaking of, there was a slope of $1\frac{1}{2}$ to 1 on either side, but the slope—really, the bridge was about sixteen feet high, and $1\frac{1}{2}$ times that is about twenty-four feet, or it would require twenty-four feet. As a matter of fact, the span is almost twenty-two feet, and then the block that was across the end here provided for the remaining distance.

Q. Can you detail any more fully the slope and the degree of slope that you used? Can you interpret it any more closer or more fully? In general,—that one in particular? It is more a question of explaining the terms that you used.

A. A material like earth, or any rock or earth, or any material that is used, will have what is known as the “angle of repose”, or the slope at which the material would just begin to slide. Now, in building a railroad embankment of earth, we use a slope that is slightly flatter to prevent the slide, and $1\frac{1}{2}$ to 1 is the slope at which earth will

(Testimony of M. F. Clements.)

not slide; that is the slope used in constructing a railroad embankment. I stated here in making the five feet, it really made it too short. But rock will stand on a steeper slope, so rock was placed on this slope when it was raised in 1898. Around the end of an embankment, it is customary to place riprap. It is usually stone of a size of one or two-man rock,—what one man can lift, and two men can lift; that was [449] dumped around the edge of the slope, but it was higher to provide a steeper slope when this was raised, for the reason that the earth would not stand on a steep slope; that was required for the five-foot raise. Now, this was the bridge as it was built in 1898——

Mr. MAURY: Can't that be left there for cross-examination?

Mr. McCARTHY: He has got another change to make; he is only down to 1898 now; he can put it back.

Q. What are you now putting in, in gray color, at the ends?

A. In 1903, the timber abutments that were in the position I had them were removed and concrete abutments were built. You notice that there is a wing on each end. As the bridge was originally constructed in the lower position, those wings would not have been necessary for the reason that the slope would have extended from a point higher up, but on account of the raising of the bridge, it was necessary to put in the slope, so that the slope

(Testimony of M. F. Clements.)

of the material could come at a lower elevation,—the abutments built at each end. The brown-colored pieces that I referred to as the slope at either end, surrounding the abutments, was earth or dirt of some kind; that is the embankment; these blocks are simply to cover up a hole there,—in the making of this; that is to get them over the footing of the concrete.

Mr. McCARTHY: While you are fixing that, the jurymen may be interested in seeing a section of the slope of the model. (Handing to jurors).

When this was constructed in 1903, the slope started from the wing of the abutment, and was at a steeper slope than the one at the side made out of loose rock, which would stand on a steeper slope. That is the bridge that existed in 1929,—on June 7, 1929. After that was built, the permanent abutments were put in and the bridge raised to the height I have indicated; then that bridge remained in place and was in place, on the day of the flood.

Q. Now, you gave your opinion before, of the bridge as compared [450] to the timber trestle bridge in efficiency, and made a comparison in efficiency, and gave your conclusions in percentages,—I think you gave a difference in efficiency of 22%. Now, was the bridge raised after you made the comparison and gave the 22%?

A. I gave that comparison,—it really referred to a high-water of 1893 and 1897, which was the same elevation, which was,—the efficiency below that high-water mark.

(Testimony of M. F. Clements.)

Q. Will you compare the model which you have set up there, with the Howe truss span that is in place, and the bridge that was in place in June, 1929, in efficiency? How did they compare in efficiency, in your opinion, so far as carrying off water is concerned?

A. Well, I stated that was below high water mark of 1897 and 1893. If you compare them on that same mark, there is no greater capacity for the bridge. * Of these two bridges, the steel bridge would take care of the most water, in my opinion. As to a comparison of the bridge that was in place in June, 1929, and the bridge with the Howe truss span in place, in percentages, so far as efficiency, I can't give you the exact amount, but I would say more than double; it would increase it 100%. I placed a second wire on here, which represents the high-water of 1921, and which—and when I say that “increase”, probably I better say below the high-water of 1921 that I think it would be 100%. Now, there was still another high-water mark,—the one that isn't on yet,—and that was 2.8 feet below the top of the tie; that is about right (placing wire). As to the number of yellow wires I now have showing on the bridge that was in place in June, 1929,—the lower one represents the high-water of 1893 and 1897; the middle one represents high-water of 1921, and the upper one represents the high-water of 1929. At the beginning, I called attention to lines which were on the sections of the

(Testimony of M. F. Clements.)

two bases as being a match-mark. That was placed in that way to represent the relative position of the two bridges; that is, the steel bridge was [451] about ten or twelve,—maybe fifteen,—feet; about fifteen feet east of the original bridge.

There is only one thing I would like to say about this concrete dam. At the same time that these concrete abutments were built in 1903, there was built a concrete dam, shown on the relief map; the position is something like I have shown with that line. I placed a wire on the base of these models, which is something near the location of the dam; there was a wing on this side, on the east end, extending over to the embankment,—that is on the west end,—no.

Mr. MAURY: Have you got them marked east and west end?

A. This is east; that would be on this side; this wire should be placed there to mark the location of the dam, but there was a wing there extending over to the railroad embankment.

Mr. MAURY: I think that would be better by an arrow of which is north and which is south, and which is upstream and which is downstream,—rather than east and west, because the stream is flowing north and south. Which is the downstream side now? Which is that? Is that upstream?

A. No.

Q. That is north.

The concrete dam was in a position not quite parallel with the railroad; it was a little farther

(Testimony of M. F. Clements.)

away on the east end, and there was a wing from the concrete dam extending over to the railroad embankment. At the east end, it extended into the embankment as a straight wall, (I am pointing to the relief map now). The wing on the west end, the dam parallel with the track, or very nearly so, and stopped in the bank, which was the north bank of a small stream which extends from the east and flows along the north side of the railroad. That stream is about six miles long, originates up near the station called Yates. Now, the water from this stream along the north side flowed into this dam—above the dam—[452] so that the dam itself extended straight into the embankment which was the north bank of the small stream. In 1903, there was a freshet came along and took out some of the earth. During a freshet, the water got around the end of the concrete dam and two years later a wing was built across to the railroad embankment, and the entire dam was raised two feet in height. As I said, the water from this small stream on the north side flowed inside and supplied water for this reservoir that was created for the building of this dam. Over on the east end of the bridge there was a water tank. That was built——

Mr. MAURY: There was one at the west end; that was in 1912.

This is in 1903; it was at the east end,—built just outside of the dam. The dam was first constructed in 1903, twenty-three years after the con-

(Testimony of M. F. Clements.)

struction of the railroad. (Witness goes to witness chair).

I have computed the area underneath the bridge in which water might flow,—the bridge which was in place in June, 1929. As to the area in square feet, of the waterway opening under the bridge that was in place in June, 1929,—for the entire bridge, the approach spans above its slope, and the 70-foot span above its center, above the channel, there is about 1350 or -70 feet.

I have been up and down Beaver Creek and up and down that valley. I have heard all of the evidence,—at least, since the defendant has been putting in its side of this case.

Q. From your study of bridge records and your knowledge of Beaver Creek that you have testified to here, with reference to your work as District Engineer, or whatever your position was at Glendive, are you able to form an opinion as to whether the bridge over Beaver Creek, prior to the flood of June 7, 1929, provided an adequate opening for Beaver Creek? Can you form an opinion?

A. I can; yes, sir. [453]

Q. What is your opinion?

A. I consider the bridge was ample to carry any water previous to the 1929 flood. Stating the reasons on which I base my conclusion: The highest water previous to that date was 1921, and there was no damage to the bridge in 1921; and the water was not raised to an elevation that would particularly cause damage to adjacent property.

(Testimony of M. F. Clements.)

Q. Mr. Clements, there has been a suggestion made here during the presentation of the plaintiff's case, that certain formulas or formulae could be used to determine the size of a bridge, such as is required to carry the railroad over Beaver Creek. What comment, if any, have you to make with reference to the application of any formulae as a guide for the construction of such a structure?

A. Well, I will say this, that I have been working on bridges and culverts for about thirty-five or thirty-six years, along there. That is a longer time than some of these formulas have been in existence, —a longer time than some of these formulas have even been presented; that is a longer time than even Professor Talbot—I am personally acquainted with Professor Talbot; I have used his formula for spirals for curves. Practically all these formulas are prepared by teachers of engineering in schools and they have been made from collection of data from men who have had experience. But they are not original with the men who present them, although they take their name many times; they are all empirical formulas; they are not developed from scientific data; they are an accumulation of actual data. And some special mathematical curve,—Myers' formula being a parabolic curve; they are a substitution of some theoretical curve for some actual data. That is the way most empirical formulas are made anyway. And any drainage area formula can only be applied to a drainage area that

(Testimony of M. F. Clements.)

is covered by a single storm; otherwise, you [454] can't make comparisons, and they are used only for culverts in forming an opinion; they are not accurate. Every formula will have coefficients which will make a variation of from 1 to 4 in Myers' formula, or 1 to 6 in Talbot's, and there might be 1 to 6 variation. So, when you come down to the actual size of culvert needed, you might guess at it, in applying the Meyers' formula, if the area is less in size than the second storm—that could not be applied to Beaver Creek. If you applied it to Beaver Creek Valley, you might obtain a value that was ten times the amount of water that came down Beaver Creek Valley at this time, by application of different coefficients. Formulas are used only to form an opinion in designing culverts for small drainage areas—even as to culverts. We don't adopt a culvert as a standard size, as developed from a formula. I have tried to develop a formula on the Northern Pacific Railway. The whole Northern Pacific Railway covers territory that has zones that have entirely different rainfall and entirely different conditions. So, you might guess at the culvert at the beginning. And another thing—we have standard culverts. Talbot's formula will give greater sizes on the small areas, and above a certain size, the Myers' formula will give the larger. Now, we use a minimum size, so the Talbot's formula would not be for us anyway, and we get a larger size than from what could be determined from a formula.

(Testimony of M. F. Clements.)

Q. Mr. Clements, directing your attention to the Montana statute, can you form an opinion as to whether or not the bridge over Beaver Creek, as constructed over Beaver Creek, with the slopes in the manner you described partially filled, and still leaving partial waterway, as you described in the evidence, result in the restoration of the Beaver Creek watercourse to its former state of usefulness, as near as may be?

Mr. MAURY: We object. The Court determines the Montana law; we do not permit Mr. Clements to invade this [455] field. That is a question for the Court to give instructions on as to the law, and for the jury to pass upon the fact; also, it is asking Mr. Clements to instruct the jury as to the law.

Mr. McCARTHY: We are merely asking him his opinion,—first, whether he has an opinion.

The COURT: I suppose he could got to the extent of saying whether he had the Montana statute in mind, and attempted to comply with it. Of course, it would be for the jury to say whether he did or not, as a matter of fact.

Q. Mr. Clements, the Montana statute with reference to bridges over streams, constructed by railroad companies, such as was done here at Wibaux, in substance, requires that the stream be restored to its former state of usefulness as near as may be.

Q. Having in contemplation a safe bridge now, can you form an opinion as to whether or not

(Testimony of M. F. Clements.)

the bridge over Beaver Creek that was in place in June, 1929, met the requirements of the statute?

Mr. MAURY: We must object. Mr. Clements has shown himself at all familiar——

The COURT: I will sustain the objection without any further argument. I don't know that Mr. Clements built this bridge. Did Mr. Clements build this bridge?

Mr. MAURY: No. Mr. Clements is a younger man than I am; it was built in 1883.

The COURT: As an expert, let him testify as to what was done towards compliance with the law, towards restoring the stream to its former usefulness, as near as may be.

Q. You heard the suggestion of the Court, which I adopt. Will you please answer it?

Mr. MAURY: We still reserve our objection.
[456]

The COURT: Very well. Note an exception. He may answer the question as I have suggested.

A. My interpretation would be as to its carrying capacity of the water, and I think I am qualified to answer on that, that it would.

Q. All right, give us your opinion.

A. My opinion was, it would carry the water as well as it would, had there been no railroad there.

Mr. W. L. Darling was chief engineer of the Northern Pacific Railway Company, or its predecessor, the Northern Pacific Railroad Company, when the bridge was built—as it was finally placed there;

(Testimony of M. F. Clements.)

in 1896 was when the permanent bridge was first built.

Q. Will you tell us what the reputation of W. L. Darling was as an engineer?

Mr. MAURY: We object to the reputation of W. L. Darling or anybody else, when the testimony of all—the plaintiff and the defendant—shows that the bridge was not built according to the laws of the State of Montana; that the bridge is only 65 feet long——

The COURT: That is a matter of argument.

Mr. MAURY: That is a matter of stating our position in the record at this time, and preserving our record,—because this Court is different from the State Court, and we must preserve our record here, and preserve our exceptions. Where it has been said in all the testimony, that the bridge was only 65 feet long and that between the banks of the stream it was 175 feet at the nearest point,—that the defendant's engineers assigns to it,—and at the nearest point above that, that it was 150 feet——

The COURT: I think that is a matter of argument. What [457] is your objection?

Mr. MAURY: My objection is, that when the evidence is before the Court, it is not allowable for any defense to be made about whether they had any expert engineers or not.

Mr. McCARTHY: Our position is that the railroad used reasonable and ordinary care to get a man to supervise the——

(Testimony of M. F. Clements.)

The COURT: It is a matter of argument, whether you have done it or not. What is your objection to his testifying as to the reputation of W. L. Darling? Make your objection clear.

Mr. MAURY: The objection is that it is not justification for breach of law by hiring men of reputation to do a thing; that acts that they do must speak for themselves. In argument of that objection, the only State that permits that is Pennsylvania, and every other State Court, and the Federal Courts, hold——

The COURT: I still insist that you are now making an argument that you will hereafter state to this jury instead of making an objection that you will make to this testimony. If you will make an objection to it, I might sustain it.

Mr. MAURY: I object on the ground that the reputation of the builder of a bridge is not a matter properly in issue in this case,—or legally in issue; that the question is, what was the work? Not what the reputation of the man who made it was.

The COURT: Well, if W. L. Darling were here, present in this courtroom, you could question him as to his qualifications,—his schools, qualifications and experience. I will overrule the objection; you may answer. [458]

Mr. MAURY: Exception.

Q. Will you tell us the reputation of W. L. Darling as an engineer?

(Testimony of M. F. Clements.)

A. He was considered one of the best construction and locating engineers in the United States.

Q. At the time the bridge in question was built, who, under Mr. Darling, occupied the position under him, as you do now, as bridge engineer, if you do?

A. Mr. K. Hildegard.

I have seen Mr. Hildegard on two occasions. I am familiar with his reputation as a bridge engineer. The bridge in question was designed by Mr. Hildegard, or men working under his direction. Mr. Darling was the chief engineer, and under him, in specific charge as bridge engineer, in bridge construction, was Mr. Hildegard.

Q. Will you tell us what the reputation of Mr. Hildegard is, or was, as a bridge engineer?

Mr. MAURY: We make our same objection.

The COURT: Overruled.

Mr. MAURY: Exception.

A. Mr. Hildegard is a graduate of a university in Switzerland. He was bridge engineer for about eight or ten years, and I have had occasion—I will say this: it is a bridge engineer's duty to bring in two principal things—first, in the designing of bridges and then——

The COURT: Just answer the question.

Q. Just tell us what his reputation was Mr. Clements?

A. It was good; first-class. He is alive now. He is living in Switzerland.

Having been shown plaintiff's exhibit "26", this is the same profile map that was referred to by the

(Testimony of M. F. Clements.)

witness Lyman, during his testimony. I can find on that profile the location of the bridge over Beaver Creek, at Wibaux; it is shown on this profile. It has been testified to in substance, by Mr. Lyman, that the banks of [459] Beaver Creek at Wibaux, were 600 feet apart, as disclosed by that profile. I do not agree with that statement; the profile does not show any banks at all, of Beaver Creek, in the vicinity of the bridge. Explaining to the court and jury on what I base my conclusion and where my disagreement with Mr. Lyman comes in: this profile is a copy of the Northern Pacific profile, and from what I know of the records, it shows on here several elevations, or several lines representing the track, (witness pointing out to jury). This profile—now, this is made in two different scales—the vertical scale 20 feet equals one inch, and the horizontal scale, 400 feet equals one inch; if they were on a natural scale, this would have to be twenty times as long. On the profile here is shown various lines which represent the grade of the track. Those several lines on here represent the grade of the track and of different elevations, due to the raising of the grade of the track at the time this bridge was changed. Now, it shows the 1880 elevation, the 1898 and at the time the bridge was constructed, it was raised $3\frac{1}{2}$ feet and then 5 feet; and since 1929, it has been raised another 5 feet. I am not sure whether this shows—anyway, we are speaking of the ground-line; this lower zigzag

(Testimony of M. F. Clements.)

line represents elevations at various points along the railroad at the time the railroad was constructed in 1880. This profile was made in 1903, but it is always the custom in transferring to a new profile, to copy the old ground-line; that is the 1880 ground-line. Now, there has been referred to by Mr. Lyman, some banks of the stream, referring to this point 01 and 02, where there is a break in the line—vertical break—Mr. Lyman interpreted those to be banks of Beaver Creek. I say those are not the banks of Beaver Creek.

Q. Can you illustrate what you pointed out on the profile exhibit, plaintiff's exhibit 26, any more clearly on the relief map, Mr. Clements? [460]

Mr. MAURY: Q. You say those are not the banks,—are not the banks of Beaver Creek, from 01 to 02. You say that?

A. That is what I said.

Q. If I may interrupt, what are they?

A. I can explain that on this relief map. This map represents Beaver Creek coming down, following this blue line,—coming down to the Beaver Creek bridge at this point. I find marked on this map, "Possum Hollow", which is another waterway coming down there, and that drainage area extends up there about three miles; and on the north side of the railroad is another small stream follows down and empties into Beaver Creek north of the bridge, and this waterway extended almost up to Yates, about six miles. Now, at every point up this

(Testimony of M. F. Clements.)

stream, as I could observe, where you find a junction of two or three streams, there is a natural basin formed, or lake, you might call it, or pond. This stream, in following down the zigzag course, cuts on the outside of the curve, silts up on the inside,—there is a wider section at each curve. This stream curves around, make a curve between the highway bridge and the railway bridge, and there is formed in here a natural reservoir,—in below here—that existed before the railroad did. At one time, it followed closer to Wibaux Street—this is Wibaux Street. And at First Avenue, it cut across in this direction, and it followed down; and at the Wibaux house a wall was built pushing out into this pond, in order to make more land back of his house. Now, this natural pond as it existed—it existed before the railroad was there—and still exists. The little stream coming down the north side originally cut across here where the railroad embankment now is, and followed almost directly west where that embankment was. You can see a little depression on this map at this point. Now, that is the point that is shown on the map, and to which Mr. Lyman has testified as being the banks of Beaver Creek. From the records in St. Paul, and old profile, I formed [461] the opinion that the east bank of Beaver Creek was at the location of the east end of the pile trestle, or a distance of about 125 feet away from the point that Mr. Lyman has designated as the east bank of Beaver Creek on the profile. Now, the tendency of this stream has been to cut on the outside of the curve and silt up on the in-

(Testimony of M. F. Clements.)

side. Now, this Beaver Creek with its banks, has been winding around through this pond at different locations, ever since the construction of this railroad there; probably, at one time, it was near the Wibaux house. The west break in the profile, that was shown on that profile, was very near the center of the streets coming across here, immediately back of the Wibaux house, there never was—I might say this: there might have been a bank over here at one time, but it has been gradually moving around this curve in the stream, and has been moving east, and is still moving east. This section of the highway bridge was for many years, designated as a slough, locally—at Wibaux,—so that this pond existed before, and still exists, and the breaks in the profile, in the banks of that stream, are breaks in the banks of that pond,—not of the creek.

Q. It has been testified by Mr. Lyman that in his opinion, the maximum amount of water that passed through Wibaux at the time of the flood on June 7, 1929, was 15,000-odd cubic feet per second, and he then gave it to us in round numbers, as 16,000 cubic feet per second. Mr. Clements, assuming that only 16,000 cubic feet of water per second came to the railroad bridge on June 7, 1929, what have you to say, or what is your opinion, as to whether or not the bridge could have adequately taken care of 16,000 cubic feet of water per second?

A. If you were to consider the entire area of the bridge, which I gave as 1370 feet, and divide

(Testimony of M. F. Clements.)

that into 15,000, the bridge as it stood in 1929, would have taken the water at a velocity of between 11 and 12 feet per second, which is not rapid or unusual. I [462] have seen water pass through bridges going almost 20 feet per second. I think that I have fully explained the reasons on which I base my conclusion; I just divided the area of the bridge into the total second-feet of water, and it gives the velocity of the water in feet per second.

Cross Examination:

(By Mr. Maury).

On defendant's exhibit D-24 are the letters and figures, "H.W. 1900, 7.3". That means "High Water in 1900," shown on the record as being 7.3 feet below the top of the tie. That was given as on Bridge number 184; that was the bridge that was standing there in 1929—it was, with the exception that the abutments were changed in 1903,—but the same height. If this record (D-24) was correct, in 1900 the water just touched the girder of that bridge. If the water touched the girder, and kept at the girder for any great length of time, it would not necessarily have flooded the town of Wibaux, just as it was flooded in June, 1929; the water of 1929 was about 5 feet higher than that. And if it kept on touching the girder, it would not necessarily, keep on filling up. As to whether "it wouldn't do any damage to anybody if it went down quick enough," will state that if it just touched the girder, it wouldn't be backing up at all; it would be passing through.

(Testimony of M. F. Clements.)

When I gave a space 1370 feet, I was not taking into consideration the space above the girders on the sides; I was just taking the clear opening, below the steel.

Q. Below the girder?

A. Below the steel, for the length of the bridge.

I said that formulas were made up of a great many instances. As to whether the multiplication table was made by a great many instances of addition, will state "multiplication is addition." I don't know whether you call multiplication an empirical formula or not,—it is made of a great many units; I wouldn't say that [463] it was an empirical formula.

Q. Mr. Clements, you said that Talbot's formula had a variable coefficient——

A. They all have——

Q. Listen to me: of 1 to 6; and that you knew Prof. Talbot?

A. Well——

Q. Answer that. Did you say that?

A. No.

Mr. McCARTHY: That is two questions.

Q. Did you say that it had a variable coefficient of from 1 to 6?

A. No, sir. (Mr. Maury requested reporter to read testimony on direct examination on this point).

Q. Now, you know that Talbot's formula has a variation of only from $\frac{2}{3}$ of 1 to 1?

(Testimony of M. F. Clements.)

A. The first coefficient is $1/3$; the next one is $2/3$. The last one is what I meant; that is, the sixth one is what I meant.

Mr. McCARTHY: If you will look at 252 in Webb's, Mr. Maury——

Q. Now, does this language occur: "For steep and rocky ground, C varies from $2/3$ to 1," on page 252 of Webb—Railroad Construction?

A. Yes, sir. I wouldn't say that it has reference to the variable of Talbot's formula.

Q. Aren't these words above here "Talbot's formula"?

A. Yes, sir.

Q. And the words: "Multiplied by the 4th root of the drainage area to the cube"?

Mr. McCARTHY: Objected to as not proper cross-examination there, to examine him from a text book on a formula he says he rejects.

Mr. MAURY: He is thinking he can "put something over."

Mr. McCARTHY: I resent that remark, and counsel knows better; and I ask the Court to instruct the jury to disregard the remark.

The COURT: I certainly will.

Q. (Reading): "C varies from $2/3$ to 1"——

A. In that book; yes. [464]

Q. Where else can you show us any other formula of Talbot that has any variable of 1 to 6?

A. I have a record in my office, computation made by Talbot, starting with $1/2$,— $2/3$ up to 1,—

(Testimony of M. F. Clements.)

up to the last one. I got those from published data. You are quoting from a book there. I can give you something about that book too. When I spoke of Talbot's formula having a variable of 1 to 6, I was not speaking of the cross-examination here the other day; I have records in my office of computations under Talbot's formula, and they vary from $1/3$ to six times $1/3$, or 2. I think I can find that in a published, printed book, but I can't produce it here; I can't produce it here Monday morning.

Q. What is the name of the book?

A. I said I could not.

Q. No; you cannot find it in any published book that you have.

A. What is this book that you have?

Q. I am referring to Railroad Construction, Theory and Practice, Handbook, by Walter Loring Webb, Civil Engineer, Member American Society of Civil Engineers; Member American Railway Engineering Association; Member American Concrete Institute; Member Engineers' Club of Philadelphia; Assistant Professor of Civil Engineering (Railroad Engineering) in the University of Pennsylvania, 1893-1901; Major, Engineer Corps, U. S. A., 1917-1920,—Ninth Edition.

Mr. McCARTHY: I suggest the book be turned over to Mr. Clements, so he can read it all.

A. I am a member of the American Society of Civil Engineers; American Railway Engineering Association; American Concrete Institute; member

(Testimony of M. F. Clements.)

of the Engineers' Club of St. Paul; Member of the Minnesota Federation of Engineers and Architects; Member of Sigma Xi; Member of the Associated Engineers' Society of the University of Iowa. I have had thirty-five years' experience,—longer experience than this man has had.

As to when I first had anything to do with the construction of this bridge, will say that there was no change made in the bridge from 1903 until after the flood of 1929. I designed the new bridge, or men under my direction, designed the bridge after that time—after the time of the flood—but this particular bridge that existed in 1929 there never has been anything to do with it; there never has been any trouble from any washout or trouble of any kind.

The exhibit D-23, introduced in my testimony, is a photostat copy of a record and the data from which this book is maintained is obtained from the local supervisors of bridges and buildings, who do the actual "house-keeping" or repair work on bridges or buildings. Each month, they send in a report of work done, and there is one maintains this record and it goes to him and he copies any changes that are made, into this book. This was not always just one page—this is a page out of a book, large book—we have for the whole railroad twenty of these books; they are very large and cumbersome. Whether this page from which this photostat copy was made was in existence in 1891—the

(Testimony of M. F. Clements.)

other sheet you will find who actually made the sheet, 3/13-91,—that was the date the books were started.

Q. I am talking about this one here, D-23.

A. They appear opposite each other; here is the binding of the book in the middle; here is the pages you turn over.

Q. And are these, the original records, of the same age—the paper and the page and everything—D-23 and D-24?

A. This is the same, that is, the original from which this was taken are both of the same date “91”. I had the original pages, now back in St. Paul, photographed for these exhibits.

Q. Were the various bridges put on about the time that they were erected—put on the original now?

A. On the original; when the reports came in, these were put on. You find in the left-hand corner here the bridge with the Howe truss shown there (pointing [466] out to the jury). We start at the extreme top of the page; the first one is 311, which is now 184; here is the bridge that has the Howe truss. At the extreme bottom, left-hand, that is simply a vertical line representing the first bridge—the first bridge that I set up, was continuous pile trestle, but a portion of the bridge had been replaced by this Pony Howe Truss—on the model. Then, following that, was the bridge,—the permanent bridge, the various lines which show the

(Testimony of M. F. Clements.)

various elevations. It is rather difficult for a layman to follow all those lines—all those marks.

Q. We are going to ask you to translate them all by Monday morning,—all of the bridges. What is that?

A. That is the bridge that existed over Wibaux Street—that existed after the flood. The next one is the present one over Beaver Creek; that bridge was built after the flood in 1929. That, in the extreme right-hand corner, is the underpass for school children at C Street. That, at the top of the page, is the bridge that existed over Wibaux Street at the time of the flood. The east section of this here, the east span,—that is the same span that was in the other bridge, in the center. As you understand it, that same steel there in the east span is this here (pointing to the bridge model)—what this represents in actual life. On these two exhibits, D-23 and D-24, there is a vast deal of abbreviation and lettering and figures that only an expert can understand,—well, a man could understand it if it were explained to him at the time, if he wanted to look at it, probably, but to the ordinary man, it needs a great deal of explanation.

Q. By the way, looking at D-24, can you tell us what the words and figures “H.W. 4/1-93—7.7” mean?

A. It has nothing to do with the Beaver Creek bridge. You find in the left-hand corner here.

Q. Oh, yes, I see.

(Testimony of M. F. Clements.)

A. Now, there is one in here; that is that school undercrossing; it is out of place, because the page was filled up. There is bridge 184,—it was originally called 311; and [467] this is the Wibaux Street—which was 184.1. We find some more letters “H.W. 4/1-93—7.3,” and “Beaver Creek” right opposite. That means the high-water of 1893, and that was the date of the high-water—fourth month, first day, of 1893; the high-water was 7.3 feet below the top of the ties on April 1, 1893. As to who would send in the water measurements,—well, there are standing instructions to assistant engineers—for instance, Mr. Oien is assistant engineer at Glendive. He covers certain territory, and he has instructions that after high-waters, he should go over the line and note where the high-waters were, and send in a report where the records can be kept. At Wibaux, for instance, in the last twenty years, the assistant engineer who was located at the headquarters of that particular territory, would be the man to actually take the records of high-water and send it into the company. As to who would point out the high-water mark to him when he got there on his inspection trip,—each section foreman in his territory are called upon to note where high-waters were, and the assistant engineer goes over the ground as soon as he can, to note these high-waters, and records can be found in the grass and debris of all kinds, to show where high-water was. I can't say as to whether the man of the Northern Pacific Railway Company who was supposed to report

(Testimony of M. F. Clements.)

it in the last twenty years, to the Northern Pacific Railway Company, was a section foreman named John Presthus, at Wibaux.

Q. Whoever was the section foreman was the man?

A. The assistant engineer makes many observations of his own, but each employee that is on duty along that particular section is required to note the high-water, to show this information to the railroad. In regard to how he measures that high-water,—well, as far as those high-waters are concerned, they are presumed to represent—I would say, the center of the bridge; he doesn't make more than one notation. [468]

Q. Does he go out on the bridge and drop a plummet through?

A. It measured down either with a level rod or tape.

Q. And the high-water mark, if I understand it, means that right at the center of the track, he drops something and measures the distance from high-water to the top——

A. To the top of the tie. All records of that kind are kept,—you call it base of rail or top of tie—the two are the same.

Q. Yes; but I am talking about where the measurements are made on the bridge. Now, Mr. Clements, if there is a very strong backing of water on the bridge—we will say there is a difference in elevation between the upstream side of the water

(Testimony of M. F. Clements.)

and the low stream side of the water, of ten feet—we will suppose that—am I not right in saying that a measurement right in the center of the bridge would be five feet in error, and too small—too short?

A. That would be a very unusual condition; if such a condition existed, the assistant engineer would take all elevations.

Q. I know; but try to answer my question: If there was a difference in elevation between the water above the bridge and the water flowing away from the bridge, of ten feet, then right in the center of the bridge a measurement would be five feet in error, would it not?

A. It would be correct for the center of the bridge.

Q. But, as a high-water mark on that bridge, it would be five feet off under those conditions?

A. It would be correct for the center of the bridge, and it would all depend on the conditions you were going to use this elevation for; if there were ten feet difference in the elevation, it would be a change in the velocity; otherwise, there wouldn't be such a drop,—the velocity must be used with it. So, if he found an elevation for the center of the bridge, it was correct for that position. The drop would be comparatively uniform as it went down from an elevation above until it got out to the ten feet below, and about half way down the slope of the water, [469] it is true that it would be half the distance of fall.

(Testimony of M. F. Clements.)

Q. And are there in existence any records of this bridge for high-water, where the measurement was taken from the upstream side of the bridge?

A. Not so designated, as I know of, as to where these measurements were taken; but the usual custom was to take it in the center,—that is the way the St. Paul office expected and required that it be done. I have not “prepared any of these little yellow wands and tacks” to show the water-mark of 1900 on that bridge.

I spoke of rainfalls in my direct testimony—that I designed a bridge to take care of rainfalls; this bridge at Wibaux is in the badlands. The badlands extend from Glendive on the west, to Medora or further, on the east. That is a region of acute storms, such as cloudbursts, in that territory.

Q. By the way, storms like that, could be expected by an engineer just from the natural topography of the earth?

Mr. McCARTHY: Storms like what?

Q. Acute storms; cloudbursts?

Mr. McCARTHY: You are speaking generally now?

Mr. MAURY: I am speaking of what Mr. Clements said.

A. Yes; cloudbursts occur in that territory; and all through that territory. I wouldn't attempt to answer that question as to why they occur there.

Q. Hasn't it been known by highschool students of physical geography that their causes are due to solstice,—mid-summer, the winds coming from the

(Testimony of M. F. Clements.)

west and coming over the snow-capped peaks of the Rocky Mountains and, on this area called the badlands, they meet the very hot winds from the central plains and make an immense precipitation of water?

Mr. McCARTHY: This would be very interesting, but we must object as improper cross-examination; we didn't go into any geography—— [470]

The COURT: I don't think you need to go into that. I will sustain the objection. Cross-examine him on the conditions there in that valley.

Mr. MAURY: We except.

Q. Have you seen in that valley scenes like that, close to Wibaux?

A. That is typical badland country.

Q. And typical of the scenery close to Wibaux?

Mr. HALL: We object to that——

Mr. MAURY: We offer this in evidence.

Mr. HALL: We object to this picture on the ground there is nothing to show it is at all similar to the condition at Wibaux; it is a picture of a badland territory.

The COURT: Is it in the Beaver Creek country?

Mr. McCARTHY: May I ask a question? Q. Mr. Clements, are there any badlands proper in the Beaver Creek valley? I mean from Wibaux south; I don't mean from Wibaux north; but I mean Wibaux south, towards Ollie?

A. You are asking a question I can't answer—as to what badland country is. As to what I mean

(Testimony of M. F. Clements.)

by “badlands”: a badland country, as I understand it, speaking from a geographical standpoint, is a country that is eroded, and it has hills and valleys and the valleys have been caused by erosion, and many peculiar shapes have been formed on account of the various types of material that is in the ground, some of which will scour readily and some will not. I have driven up Beaver Valley, up along Beaver Creek; I mean by “up”, going south. I never saw anything there that is in the pictures such as Mr. Maury is showing me.

Mr. McCARTHY: Then, we object to the pictures on the ground that they do not properly portray the conditions in the valley to the south of Wibaux. [471]

Mr. MAURY: This is subject to further examination, I hope. Q. Now, Mr. Clements, you have seen typical scenery to this right near Glendive and Medora, and right close to Wibaux——

Mr. McCARTHY: We object——

The COURT: I will sustain the objection.

I said that I took into consideration climatic conditions in building that bridge—that is one of the general conditions that are considered. The climatic conditions there at Wibaux that I took into consideration, are the type of storm particularly, or what causes the water to flow in Beaver Creek, that is, the consideration I take, it was not as great rainfall as some others, but it has many acute storms, practically all of which are comparatively

(Testimony of M. F. Clements.)

small in area, but there would be a considerable wall of water fall in a comparatively short time, making a quick runoff.

Q. Were you familiar with a storm which occurred there in 1921?

A. I know something about it, yes, sir.

Q. How far did that storm extend along the line of the Northern Pacific Railway Company?

Mr. McCARTHY: Objected to as immaterial and not proper cross-examination.

The COURT: I think so. What effect did it have on the Beaver Creek valley—the watershed?

Mr. MAURY: We want to know what the witness means by “small extent”.

The COURT: You can cover the State of Montana, if you keep on. Confine yourself to the Beaver Creek valley.

Q. What was the extent of that storm in 1921 in miles, if you know?

Mr. McCARTHY: Same objection.

The COURT: Sustain the objection, unless you confine it to the Beaver Creek valley. [472]

Mr. MAURY: Your Honor, a storm that extends out of the Beaver Creek valley——

The COURT: The objection is sustained.

Offer No. 2 (In writing):

“Plaintiff offers to prove by witness that the storm of 1921 extended from Wibaux to Medora 35 miles.

Colton - Maury
For plaintiff.”

(Testimony of M. F. Clements.)

Mr. McCARTHY: Same objection as heretofore made.

The COURT: Same ruling.

Mr. MAURY: Exception.

Q. Mr. Clements, you spoke of the type of engine that the bridge was designed to carry. I show you a picture. Was that the type of engine that went over the bridge about the time it was built?

Mr. McCARTHY: That is the early bridge?

Q. The bridge that was standing there in 1896?

A. That was when the change was made. Which one do you refer to?

Q. The bridge of 1896?

A. The two of them in there?

Q. In 1896, was this the type of engine and about the size of engine that traveled over the Northern Pacific Railway at Wibaux?

A. I believe that this engine was purchased around 1900; it might have been there in 1896, but I wouldn't be able to state the——

Q. This is the type of engine of about that time, isn't it?

A. That is what they call a ten-wheel engine.

Q. And they were in use in about 1896?

A. Oh, well, they were still using engines like that.

Mr. MAURY: We offer it in evidence; it is marked X-11.

The COURT: What is the purpose of introducing it? What light will it throw on the case?

(Testimony of M. F. Clements.)

Mr. MAURY: As the weight of engines increased, the bridge should be increased.

The COURT: Very well; it may be admitted in evidence. [473]

I am not positive about the number of changes made in the bridge about 1898. The spans were strengthened, I hadn't mentioned this particular thing, but they were increased in carrying capacity later than '94. But that is about the time we adopted a new standard in the design. In using the design, we have what we call a "typical loading"—not necessarily a typical locomotive—one that could be used years ahead of its time. This one,—that was reinforced, I think, about 1904. I think the bridge record will give the date.

Q. Yes; when was that bridge changed?

A. A center girder was put in. You see, it has two outside girders supporting the ties. A center girder was put in carrying the—I don't know whether it shows it or—1904, the bridge was reinforced. As to how much it was reinforced in 1904,—it was increased probably 50%; there was a third girder put in and the carrying capacity increased about 50%.

Q. The bridge designed in 1896, was not standing there in 1904, was it?

A. The original bridge was standing. As to what was added to it: put in some steel; there was no change in the piers or anything of that kind.

(Testimony of M. F. Clements.)

The bottom clearance line of the middle girder placed there was the same as the outside ones.

Q. Hadn't there been a material, substantial change from the plans of Darling as early as 1902, in that bridge?

A. In 1898, it was raised; and the original plans were not changed then,—it was simply added to. The abutments were built later. There was no change in the piers, but they were raised five feet. When they were raised five feet, we did not have to fill in on the stream side in order to hold them up for the heavier engines. Any change in the raising there had nothing to do with the strength; that added nothing to the strength as far as the carrying capacity in carrying the trains. When the center girders were put in in 1904, that meant the steel portions were strengthened 50%. That [474] is due to the purchase of heavier engines after the time that Mr. Darling built the bridge; and we put the concrete right on top of the pier,—illustrated in the model. When the water cleaned that out in 1929, additional concrete work was not revealed on top of the east abutment; I would say that was not additional concrete work (witness examining exhibit handed to him by counsel). The abutments were built at the elevation of the bridge as it existed in 1929; those abutments were built in 1903, and never any change made in them. Defendant's exhibit Y-30 looks very much like the east abutment after the flood cleaned it in June,

(Testimony of M. F. Clements.)

1929; I would say that there is no additional concrete work put upon that. As to whether I would say that that bridge stood there just according to Darling's plans, until June 7, 1929, will state that there was no change in the substructure,—the piers, embankment, and all—from 1903 until 1929. As to what change was made between 1896 and 1903, the grade of the track was raised in 1898, five feet, and in 1903, the abutments were built; there was no change in the substructure or the embankment as such. In 1904, as I read the record, the girders was strengthened after that, carried on the substructure,—were increased 50% in 1904.

Q. A bridge is designed for down-thrust, but very small side-thrust, is it not?

A. Designed to carry the vertical loads and the result of tractive effort along the track, or the setting of brakes. This was at a point where trains would be coming down steep banks from both sides, and brakes would be set; that setting of the brakes does not add very much to the weight, or the down-thrust. Many times, it is—the usual increase in the vertical loads, to take care of longitudinal thrust is 20%, but from actual tests, the longitudinal thrust does not exceed more than 8%; the brakes on a car or engine will not exert any greater influence than that. [475]

Q. Now, the type of engine rose in weight, to what extent in the next few years after that bridge was built? How much did you increase the weight of engines going over there?

(Testimony of M. F. Clements.)

A. When the center girders were placed, the bridge was made equal to a specification load which we call E-52.

(Question repeated):

Mr. McCARTHY: It would be very interesting to hear all of this, but the witness says that so far as the water-carrying capacity of the bridge was concerned, there wasn't any difference; that whatever strengthening there was done as far as the girder was concerned, it was on the superstructure. It wouldn't have any possible effect whether we ran a light engine or a heavy engine as far as the water-carrying capacity is concerned. Objected to as immaterial, irrelevant and incompetent, and improper cross-examination.

The COURT: He has told you it was because of the additional weight of locomotives, to provide for that.

Mr. MAURY: We want to show how much the weight was and how they provided the original plans by filling up the abutments.

Mr. McCARTHY: The witness says there was no change. What is the difference whether there was a heavy structure on top, or light, or whatnot?

The COURT: If there was a filling up of abutments there, why don't you go directly to that and find out about it? If the opening was decreased, or if there were changes made, I can't see either what difference the weight of a locomotive has to do with it. There may be various changes I sup-

(Testimony of M. F. Clements.)

pose. What about the carrying-capacity so far as the opening is concerned?

Mr. MAURY: We say it in nowise corresponds on the model [476] as to what it was when the bridge was first built—as to these two side-aper-
tures,—it doesn't correspond at all.

Mr. McCARTHY: I think it is apparent that counsel is merely trying to delay the examination of Mr. Clements until Monday morning, so he can confer with his engineers over Sunday.

Mr. MAURY: Not at all. I know just exactly what they did in the way of change in the Darling plans, and I want to establish that by the testimony of this witness just as well as by the testimony of others.

The COURT: Proceed. You can get there while you are talking.

Mr. MAURY: Yes; that is what I wanted.

The COURT: Still, I don't see the purpose of it, and I will not let you go very far unless you develop it very soon.

Q. Did there have to be a strengthening of that abutment when the engines were increased in weight?

A. No, sir.

Q. Did there have to be a straightening of that abutment when the track was raised?

A. No, sir.

After 1896, the track was raised first in 1898; it was raised at the time the Beaver Hill was cut

(Testimony of M. F. Clements.)

down and wasted the dirt in the sag; it was raised five feet. It was not raised again, before 1929. When the steel bridge was built, the track was raised three and a half feet, so the bottom of the girder would not be any lower down or project into the area any more than the Howe truss. And the abutments were not built until 1903, and there was no change in the abutments whatever until the flood of 1929.

Q. No change?

A. None at all.

Q. Then, there was no change in the strength, according to your testimony, of the abutment?

A. None whatever. [477]

Q. And no change whatever?

A. Not after 1903,—none at all. Between 1896 and 1903, it stood as the Darling bridge; it didn't have concrete abutment,—it had timber abutment. But the piers—except in 1898, there was five feet additional height placed on the piers. When I say the bridge was safe all those years, I mean both—safe for the citizens of Wibaux living upstream from it, and safe as a structure that would stand. It was safe as a structure that would stand even after the flood of June 7, 1929,—it did stand.

Q. Will you place back the second bridge that you showed?

A. On the lower level?

Q. Yes; on the lower level. (Witness placing portions of model).

(Testimony of M. F. Clements.)

A. That is in 1898 that you want?

Mr. HALL: The second was in 1896.

Q. Yes; I want the second bridge you showed us. The one I want is the second one of the permanent—How high is that one above the point “B”?

(Witness measuring).

A. $21\frac{1}{2}$ feet.

Q. From the low water mark?

A. Bed of stream.

Q. What is the highest water mark that you have on that bridge as it stood there?

Mr. McCARTHY: The last question, Mr. Maury, was the difference between the bed of the stream there and the top of the tie?

Mr. MAURY: And the top of the tie.

Mr. McCARTHY: And that was how much?

Mr. MAURY: $21\frac{1}{2}$ feet.

A. This is down,—10.8 feet.

Q. From the top of tie to what?

A. To the high-water mark.

Q. Then, that shows 10.8 feet. Was the viaduct there at that time?

A. That was built in 1912.

Q. There was no opening there at that time? Why are these both on the same side—those yellow strips? When there is any binding [478] of water, the water is never the same on both sides—

Mr. HALL: Objected to as repetition.

(Testimony of M. F. Clements.)

Q. How much of the space between the abutments and the piers was covered by that water mark? Have you calculated it?

A. No, sir.

Q. How much of the entire space from the pier to the abutment was taken up by that structure there?

A. You mean how far it is from the clear opening?

Q. Yes.

A. It is about 17 feet clear opening between the pier and the abutment.

Q. How do you compare Mr. Bernard Blum's reputation as an engineer—bridge engineer—with Mr. Darling?

Mr. McCARTHY: If the Court please, I think Mr. Clements is working with Mr. Blum. I think it might be embarrassing; Mr. Blum is here. You might as well ask me what I think of our General Counsel.

The COURT: I think I will sustain the objection. I don't see any purpose there—any reason for it.

Mr. MAURY: The purpose is, your Honor,—Mr. Blum says that is an insufficient bridge—

Mr. McCARTHY: I must object to counsel making freely, statements of that kind.

The COURT: Sustain the objection. Proceed.

Q. Mr. Clements, you have heard Mr. Blum testify about the size of the bridge that should be there?

(Testimony of M. F. Clements.)

Mr. McCARTHY: Objected to as improper cross-examination—what he heard Mr. Blum testify to.

The COURT: He can call his attention to something Mr. Blum said—some concrete fact there—and ask him what he thinks about it. If he has testified about it, then you have your opportunity to compare notes when the matter is presented to the jury.

Q. You have heard Mr. Blum asked: “How long was that bridge?” and [479] he answered: “This plat shows that that bridge was 114 feet I think—114 feet long,” and he was asked: “Was that the measure of adequacy? Is that what should have been there—an opening of 114 feet?” and he answered: “From the evidence up to June, 1929, that was according to good engineering practice, was an adequate opening.” You heard him say that?

A. Yes, sir.

Q. Was there an opening of 114 there?

A. That is the length of the bridge at the top.

Q. But was there ever, from 1896 on, an opening of 114 feet in that bridge?

A. That is the length of the bridge at the top of the tie. You cannot measure openings in one dimension; they must be measured in two directions—you measure openings in two directions; you must have the height as well as the length. 114 doesn't mean the opening at all.

Q. Did you hear Mr. Samuel Murray (he is a very fine bridge engineer),—did you hear him testify?

(Testimony of M. F. Clements.)

A. Where was that?

Q. At Baker?

Mr. McCARTHY: Mr. Murray is here—if he ever gets through so he can go back. We will have him on the stand. If this examination is prolonged indefinitely, I fear his associates at Portland, Oregon, will insist on his returning before we can get through with him. Why ask Mr. Clements to explain Mr. Murray's statements? Objected to as improper cross-examination.

The COURT: What testimony are you presenting to him now?

Mr. MAURY: Samuel Murray's; he testified at Baker, in September of——

The COURT: Call those facts to his attention——

Mr. McCARTHY: Mr. Clements wasn't there at that time, Mr. Maury.

Mr. MAURY: Oh, Mr. Clements was not there?

Mr. McCARTHY: What year is that? [480]

Mr. MAURY: I haven't it marked here; I think it is 1933—last fall.

Q. Now, would you change your opinion if Mr. Murray said—Mr. Samuel Murray, of the "Oregon" Railway: "There was a 70-foot center span and two 20-foot small girder approach spans. Question: And your conclusion was that a reasonable and adequate bridge there at all times before June 7, 1929, should have had openings corresponding with what you have named? Answer: Yes, there might

(Testimony of M. F. Clements.)

have been some variation—slight variation, but it was in that vicinity.” If Mr. Murray’s opinion was that, would you change your opinion as to whether or not that was a sufficient bridge or not, Mr. Clements?

A. No, sir. I don’t get the force of your question though.

Q. But there was never any such bridge as that described, was there,—between 1896 and June 7, 1929, of a 70-foot center span and two 20-foot small girder approach spans? They never were there, were they, Mr. Clements?

A. These you mention, 70 and 20, are not exactly true in this sense. The overall-length of these structures is more than 70 foot and more than 20. It is 71 feet, eight inches; I believe the end-spans are 20 feet 11½ inches or either 21 feet 11½ inches.

Q. That is at the top?

A. That is the overall length of the steel portion of the bridge.

Q. But there never was such an opening at the bottom, was there?

Mr. McCARTHY: Objected to as repetition. He has already suggested that you measure openings in square feet or square yards.

The COURT: Sustain the objection.

Mr. MAURY: Will you translate everything that is on those two exhibits by Monday morning, so that the ordinary person who is not conversant with them will be able to understand what they are? [481]

(Testimony of M. F. Clements.)

Mr. McCARTHY: Do it now,—if you want him to.

The COURT: Everything pertaining to this case.

A. This exhibit is a reproduction of the bridge record, reproduced by photostatic process—photostatic copies. In the left-hand column is given numbers, which are bridge numbers. This point is 3, which is 184.—

The COURT: I see Mr. Maury is tired, and I am not going to listen to this this evening. (Jury admonished and excused until Monday morning, April 2, 1934).

(By Mr. Maury):

Q. Mr. Clements, at the trial of the Heckaman case in Baker, in September and October, 1931, there were certain plans of the bridge that was built there in 1896 introduced in evidence,—called exhibits,—do you recall that?

A. Certain plans?

Q. Yes; certain blue prints.

A. You mean plans of a bridge?

Q. Blue prints of the bridge of 1896 and 1898, introduced while you were on the stand, and produced by you?

A. I believe that is true; yes, sir.

Q. Do you know where those blue prints are now?

Mr. McCARTHY: Objected to as immaterial, if the Court please.

(Testimony of M. F. Clements.)

A. I do not know.

The COURT: I think that is proper. Let him answer, if they are of any consequence in this suit.

Q. Those blue prints were withdrawn by the railway from the custody of the clerk at Baker?

A. I do not know.

Q. And they were withdrawn last September—that was September, 1933,—were they not?

A. I was not a witness in any case in September, 1933; I was not present at the trial.

Q. You were not? Those blue prints of that bridge, that were admitted in September, 1931, were then marked exhibits “A”, “B”, [482] “C” and “D”, were they not? I refer to this testimony of your’s. (Showing printed transcript on appeal to the witness). Here is “B”—Defendant’s B is a diagram of the bridge that was constructed in 1884—that is not the one. Were there further pages? Defendant’s “C”, that was a diagram of the so-called permanent bridge built in 1896, to replace the former Howe truss bridge?

A. That is correct. Defendant’s exhibit “C” was made under my directions, and introduced while I was on the stand. And then, there was a plan of the bridge as it stood there from 1898 to 1903; that was defendant’s exhibit “D”, and it was made under my direction. That was the bridge of which I purported to set up a visible concrete model here in court, day before yesterday, I don’t know where that plan, exhibit “D”, is.

(Testimony of M. F. Clements.)

I spoke Saturday, of the railroad having interfered with this tributary stream here when it was first built, in 1883, and moved it; I know that from records that are in the St. Paul office. No such records as that are here in court; this exhibit—the relief map is—the only one that shows it.

Q. This depression going down to the north of the railroad track is what you say shows it?

A. There is a small depression right here shows where the stream originally went through.

Q. By “right here”,—you are drawing a line from an inch north of the fill up to the top of the ties and westward on the bridge; and you say there is something there that shows it.

A. There is a bank here at the lower elevation—not at the top of tie; I was just giving you the top of tie. I say that it appears on the model.

Q. Mr. Clements, on exhibit D-24, no matter how many high-water marks after 1900, that John Presthus, the section foreman, might have sent in to St. Paul, they would not have been marked down on this permanent record unless they were higher than 7.3 feet below the tie—the mark of the 1900——

A. In the first place, the [483] section foreman didn't send in any information. As to who he gave it to: I stated here, the section foreman was required to note where the high-water occurred, and the elevation was taken by the engineer.

(Testimony of M. F. Clements.)

Q. Yes; no matter how many high-water marks would go into the St. Paul office of the railway from the year 1900 to 1929, they would not be marked down on this permanent record, unless they were higher than 7.3 feet beneath the top of the ties?

A. That is not necessarily, although it is the general rule.

Redirect Examination:

(By Mr. McCarthy).

Defendant's exhibit D-25 is a drawing of the elevation of Beaver Creek bridge, as it existed at the time of the flood in 1929. "Elevation of the bridge as raised in 1898 with concrete abutments placed in 1903. The same was reconstructed in 1896, except it was raised 5.3 feet in 1898. Concrete abutments added in 1903 to replace former timber piers." (Reading from defendant's exhibit D-25, #566).

I call that (indicating on exhibit) a side elevation. The side elevation shown on defendant's D-25 portrays the same thing as the model does, except in a different form.

You note on there three colors—brown, blue and yellow. Brown indicates the water that was below the high-water of 1893, and between the brown and the next high-water elevation, which was in 1921, is shown as—is that blue or green?

Q. You say whether it is blue or green.

(Testimony of M. F. Clements.)

A. Well, I give that blue; and the upper section, or yellow, is the water that is between the high-water of 1921 and the high-water of 1929. This exhibit was made up from records,—the same records that were used to make the bridge model.

Mr. McCARTHY: Defendant's exhibit D-25 is offered in evidence. [484]

Mr. MAURY: All right, no objection.

The COURT: It may be received.

Q. Mr. Clements, you were asked something here about the 1900 high-water mark, and counsel discussed it at length Saturday afternoon. What is the records so far as the 1900-mark is concerned? Explain that a little more fully.

Mr. MAURY: Object to the "facts".

Q. All right, take out the "facts". Explain your interpretation of the 1900 high-water mark, as shown on either defendant's exhibit D-23 and D-24, Mr. Clements, with particular reference to defendant's D-24, Mr. Clements,—will you comment on the record—the exhibit referred to, so far as the 1900 high-water mark is concerned. Explain it in your own way, and your interpretation of it, to the jury.

A. There are three high-water marks on the page you have there, and the first one is 7.3 feet below the top of the tie, which was the record of 1893. In 1898, the permanent bridge was raised a little over five feet—it has been mentioned as five feet—it was actually 5.3 feet; and the record of the 1897 high-water, which was the next one following

(Testimony of M. F. Clements.)

the 1893, shows it to be 2.8 feet, or 10.8 feet, which is—the bridge had been raised in 1896; the elevation of the track had been raised $3\frac{1}{2}$ feet to provide for the steel of the same clearance as the Howe truss—that is, the bottom of the steel had the same clearance, vertically, that added to the 7.3 feet, makes 10.8 feet from the new elevation of the track. The high-water of 1897 and 1893 were of the same elevation as near as—maybe one inch difference, but for all practical purposes, it was the same thing. Then, in 1898, the bridge was raised a little over five feet, that is, when they cut down the grade of Beaver Hill. The record sheet shows it to be—the 1900 high water, 7.3 feet. Now, the amount is the same as in 1893, although the grade of the track is different. But in running [485] down this record, we have not been able to find any supporting data; and all other high-water marks do have supporting data of high-water marks, in the way of letters and reports from assistant engineers, and I assume that that record is in error. The draftsman who made the record actually copied the 7.3 feet, the previous figure. There is no information we have that there was any high-water in 1900, either in the way of letters or reports. We found no one who has any recollection of the high-water, so we assume that the 1900 is in error.

On Saturday, in connection with my cross-examination by counsel, Mr. Maury read to me parts of “Webb on Railroad Construction”; I have looked at the work since. There is something that

(Testimony of M. F. Clements.)

I want to explain in connection with my testimony on Saturday: I stated that the ratio of a coefficient to be applied in the Talbot formula for size of openings of culverts had a variation of 6, and Mr. Maury, in pointing this out to me,—I read only the first part which said that the variation of the coefficient is $2/3$ to 1. Down a little further in the text, it says: “Districts not affected by accumulated snow and where the length of the valley is several times the width, it may be $1/6$ th.” That is what I referred to. I didn’t read this over Saturday afternoon; he had his finger over the bottom part; I didn’t see it; had his finger over the bottom part—“it might be $1/6$ th, or even less.” As a matter of fact, the ratio might be as much as 1 to 8, as applied by some people.

Recross Examination:

(By Mr. Maury).

Q. Has this D-24 any record of the high-water mark of 1921?

A. That is on the other sheet; it wasn’t recorded on that page. As a rule, this record—this sheet and also the diagram—these two pages, putting them together, really is the whole thing. On here, it says, “High water of 1921,” which is 11 feet below the [486] top of tie; that is on D-23.

Q. But let me understand you clearly. D-23 and D-24, as they exist in the original—not on these photostatic copies—were all made on a paper printed 3/13-91, which meant the 13th day of March in the year 1891, doesn’t it?

(Testimony of M. F. Clements.)

A. That is the record of the printer who made the original set; and as this data came in, men in the office would put it on the pages, of which this was a photostatic copy. As to who some of those men were that did that, I can recall the names,—I believe the first man who maintained the bridge records was a man named Stang,—I cannot give the initials. He was followed by his son. Mr. Stang was working on that record when I commenced to work in the same office; I commenced to work in the same office in 1907. That is the first intimate knowledge I had of how these records were kept, and had been kept. And likewise, as the bridges were changed, the new bridges were put,—or diagrams of the new bridges—were put on that page “D-23”. [487]

SAM CARLSON,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination

(By Mr. McCarthy).

My name is Sam Carlson. I live at Miles City; am a section foreman employed by the Northern Pacific. I have worked for that company since 1892. From 1892 to 1897 I was at Wibaux, as section laborer and section foreman; part of the time I was a laborer and part of the time I was a section foreman. In 1897 I moved to Shirley to work;

(Testimony of Sam Carlson.)

that is about 20 miles east of Miles City. I worked there two years, then I came back to Wibaux in 1900 in the fall; I left Shirley in 1900 in the spring and went to St. Paul, and in 1900, in the fall, I came back from my vacation and started in at Wibaux. There is a way of fixing the year 1900 particularly in my mind,—I was married that year; I didn't forget that. I took a wedding trip in 1900; we went to St. Paul, and I went back to work in the fall of 1900 at Wibaux.

During the years that I worked in Wibaux, we never had any trouble there with water getting backed up or the railroad bridge clogged with water or anything of that sort.

Q. When you went back to work in 1900—in the fall of 1900—did you find any high-water marks of any 1900-high water,—anything to indicate there had been any trouble there that year?

A. No, sir.

Mr. MAURY: We object to that. It doesn't show that he looked for it.

The COURT: Yes; sustain the objection.

After 1900, I stayed at Wibaux then until the spring of 1921. During any of that period we didn't have any trouble there or encounter any trouble with high water at the railroad bridge.

I held an official position in Wibaux; was on the city council from 1915 to 1921 I think.

Q. Now, during the years you were on the city council, did you [488] ever hear any complaint about the railroad bridge being inadequate?

A. Not that I can remember.

(Testimony of Sam Carlson.)

Mr. MAURY: Just a moment. If your Honor please, we object to that as being too remote; probative of nothing.

The COURT: Too general; sustain it.

I said I went back to Wibaux in 1900, in the fall; I remember who was section foreman just ahead of me there in 1900—a fellow by the name of Ole Olson. I don't think he is alive now. I remember a man by the name of Mr. Rehbein who worked on the section there in 1900.

AUGUST REHBEIN,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination

(By Mr. McCarthy).

My name is August Rehbein. I live at Miles City; am a farmer. I have been on the farm near Miles City since 1904. I am the man that Mr. Carlson referred to a few minutes ago as having worked on the section for the Northern Pacific at Wibaux some years ago. I was working just as a common laborer; was working there in the year 1900. I had occasion to go over the railroad bridge at Wibaux every morning and every evening. I worked there the entire year of 1900—until fall, in Wibaux. With reference to there being or not being any high-water trouble at Wibaux under the

(Testimony of August Rehbein.)

railroad bridge during that year, will say that I never seen any. The time I worked for the company was from 1899 to 1904 in June; I haven't worked for them since 1904.

ANSELIN ZINDA,

being first duly sworn as a witness in behalf of the defendant, testified:

' Direct Examination

(By Mr. McCarthy). [489]

I live on a farm out of Wibaux. I have worked for the railway company; I don't work for them now. In June, 1929, I was living in Wibaux—in the town at that time. I think I can point out here on the relief map where my house was (witness pointing).

Mr. McCARTHY: Witness indicating a house about half-way between the city water tank and the Mattie Miller house, which house is immediately to the west of the Senator Kinney house and directly north of the two white lines on the banw of the creek.

It was at home on the morning of June 7, 1929; I got up about 7:00 that morning. I saw water in the vicinity of my home when I got up; saw water around there. Between the houses there, there was about six inches of water. The water was coming from the south. The water was moving north. After I woke up, I got out and was going to make my get-away in the car; I got in the car and started

(Testimony of Anselin Zinda.)

it and was going to get to high land. I would say it was about five minutes after I got up that I got out to the car; I didn't stop and have breakfast first that morning. Well, I got the car started and I drove up in front of the house out in the road there, and a rush of water come and flooded the engine. That water came from the south. As to the depth of that water, that was about a three-foot wave. I couldn't give you any idea as to the width of that wave. This wave got to my engine and the engine died. I didn't get it started again; I didn't even try; I got out and started to wade out. After the flood was over, I found my automobile. It wasn't just where I left it; it was moved north I would judge about 50 feet.

Q. When you left the automobile that morning, how was the car standing with reference to the creek? Was it parallel to the creek or right-angles to the creek, diagonal to the creek, or—

A. The car was standing east and west. When I found it, it was headed south and north. When I abandoned the car that morning, [490] I had it in low; when the wave hit there, I didn't stop to take it out of gear,—I left it as it was and got out of there. I started for right straight for the church there, northeast. I was going to go to the railroad "dump", if I could make it—the railroad "dump"—the grade; that is, up high there where the main line is. I went to over Pickering's pool hall there, in the rooms.

I observed conditions there that day in Wibaux;

(Testimony of Anselin Zinda.)

I was looking out of windows on the north side. On my way down to the Pickering pool hall, with reference to there being or not being any water in the town of Wibaux, will say that it got shallower there; it was shallower when I got to the pool hall there—shallower than where I left. The water I encountered there was moving north.

Q. You got up to the Pickering pool hall and when looking out the north windows there, what did you observe with reference to water?

A. She come up pretty high there. Then it went down a little. I saw the railroad embankment, or a part of it, washed out that day.

Q. How was this high water with reference to the embankment and the going-down of the water? Did that take place before or after the embankment went out?

A. What do you mean—the first raise?

Q. Was there more than one raise there that day?

A. There was the first and second.

Q. All right, let us take the first raise then. Had the embankment gone out when the first raise took place?

A. Yes, sir. Then, after the first raise, it went down about a foot. Then the second raise, with reference to the first raise, was maybe 15 minutes or so afterwards. At that time, part of the railroad embankment was out. As to whether part of it was out when the first raise came, will say that when it first come, it wasn't out; when the first

(Testimony of Anselin Zinda.)

raise came, the embankment wasn't out. In connection with the first raise with reference to time, the embankment went out just before the water went down. The second raise came about 15 minutes after the first raise. (Compared with the first raise, the [491] second raise was about a foot higher.)

Cross Examination

(By Mr. Colton).

I was trying to make the grade there—the railroad—that is why I didn't go up to the church when my car stopped. My house was right there (where you are pointing). I didn't go up on the hill there at that time because there was a valley between there; that valley was running north. That is the old swale running north and south there from the water tower towards the railroad embankment—kind of an old swale. My car did not get stopped in that old swale. I stopped my car because it was in front of the house. As to whether I drove it at all,—I did a little ways. I didn't drive it a little ways towards that swale or valley; I drove it east—this way. Going down to Pickering's pool hall I went right by Kinney's house there. That is Kinney's house that you are pointing to; and then I went on over to the Methodist church here, and then I went down Main Street. I went by Nick Wagner's place of business. At Nick Wagner's place at that time, there was about a foot of water; there was a shallow sheet down there at that time. Then I went down here and got on top of the Pickering pool

(Testimony of Anselin Zinda.)

hall right here—inside there. The viaduct at that time, was the same as ever. There was quite a bit of water going through the viaduct at that time. By “quite a bit” I mean there was a lot of water going through there. That water was coming from the south. I noticed water coming by the Fullerton Lumber Company yard at that time. I didn’t see where that water was coming from.

Q. But you saw a stream of water coming right west?

Mr. McCARTHY: If the Court please, the witness is saying that the water was coming from the Fullerton Lumber Company. I have no objection whatever to counsel pointing to the Fullerton Lumber Company. But when he speaks of it in the [492] record, than I do object,—to saying that the water was coming from the Fullerton Lumber Company.

Mr. MAURY: The objection is untimely.

The COURT: I think so. Confine yourself to the record and do not assume anything that has not been testified to by the witness. Proceed.

I noticed that water going down the embankment, some. By “some”, I mean the same as any place in the valley there; I couldn’t tell you how much there was, but I did see water going along the railroad embankment. I couldn’t tell you how deep it was going through the viaduct as I walked down Main Street towards the Pickering pool hall; I would estimate maybe about five feet or so. It was around 7:00 o’clock that I got up on the morning

(Testimony of Anselin Zinda.)

of June 7th. At that time there was six inches of water in my yard, right at the house you are pointing to there,—yes, between the houses there.

B. C. LILLIS,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

My full name is B. C. Lillis. I live in Billings. I am a civil engineer. I graduated in the civil engineer course from Case School of Applied Science, Cleveland, in the year 1902. My first work was with the City of Cleveland building storm, water sewers, which involved a consideration of the flow of water. After a year in the City of Cleveland I entered the coast and geodetic survey for the Government and for about a year was on hydrographic work along the coast and for Puerto Rico. In 1904 I entered the Reclamation Service and for two years was on surveys for irrigation works in Eastern Montana. I then entered private practice with an office at Billings, and have been following [493] irrigation and drainage since that time, in Montana. I have held official positions; I had four years—from 1908 to 1912—as County Surveyor of this County—Yellowstone County—and two years as Chairman of the Mississippi Valley Water Conservation Commission for Montana; those two years were in 1932 and 1933. As to whether I am em-

(Testimony of B. C. Lillis.)

ployed by the Northern Pacific Railway Company or connected with them in any way, will state simply as a witness in this case; but outside of this case I have no connection.

In preparation of this case, I was asked by the railway company to make a study of the conditions as they existed at Beaver Creek, Beaver Creek Valley and the Town of Wibaux. I did so. My study of the conditions of the Beaver Creek Valley began before I was employed by the railroad company. Last June I made a study of the conditions in the valley for the purpose of use of storage of flood water, to make use of it in irrigation, at the request of the Governor of this State and under the Mississippi Valley Water Conservation Commission. At that time, I don't believe I had ever heard of any of these suits. Then in December, the Northern Pacific engineers requested me to go over the Valley. I made two trips over the Valley in December and another one in January and another one in March—this past month—and in connection with those visits through the Valley, I studied all the natural conditions of the Beaver Creek, its channel and its tributaries, and its topography, more or less of its geology, and the relation of the Creek and its drainage area through the Town. And then in connection with these cases where I have been a witness, I have listened to the testimony that has been submitted by the various witnesses.

I have been here practically throughout the trial of this case. I am able to form an opinion as to

(Testimony of B. C. Lillis.)

what effect if any, the existence of the railroad bridge and the bank had on retarding the water in Wibaux on June 7, 1929. My opinion is, I don't think [494] it had any practical effect whatever.

Q. Will you give your reasons for your conclusion M. Lillis? And in giving them, you may refer to your notes if you care to do so.

A. If I could refer to the relief map, I believe I could—

Q. Yes. You may refer to the relief map or any other exhibits.

A. Referring to the relief map and the testimony that has been submitted, particularly the testimony of Mr. Lyman; he testified that the water at the Massey place reached a depth of about 14 foot during the flood of 1929; that it just spilled over the bank at the sharp bend at the upper side of the Massey place. That water then according to Mr. Massey, he laid his pointer on the relief map, showed the direction of the flow, the direction almost directly north toward the town. At the next large bend in the creek Mr. Lyman testified, so did other witnesses,—and I measured it myself—that the bank was about 7 foot high. That 14-foot depth of water coming down the valley in the direction of that bend, 7 foot of it would be stopped by the bank. Of course, it would splash up at that point the same as at Mr. Massey's. The upper 7 foot of it would go right on over the town. Of course, it would be obstructed as it entered the town, somewhat; as it got to the buildings, the obstruction

(Testimony of B. C. Lillis.)

would be greater. At first, the force—the greatest force—would have been where the water hit the houses; they are the houses that were nearest, were moved from their foundation. When it got up into the town, it was just like another bank. That deflection would account for the Methodist parsonage floating off its foundation and floating to the east. Then Mr. Lyman testified as to the height of the highwater during the flood at the Nick Wagner building; he testified it was 2640.2; also at the Miller, or green house, it was 2640.6 feet. That shows a fall between the two buildings, a distance of 650 feet about, of $\frac{4}{10}$ ths of a foot, which reduced to a greater fall per mile, is 3 feet and 3 [495] inches. The water continued to fall according to Mr. Lyman's testimony, at the rate of 3 feet 3 inches to the mile. There is no reason to say it was checked up by the railroad grade if it was falling at that rate. That is more fall than the Missouri River has per mile, on certain sections. Then Mr. Lyman gave two cross sections above the railroad grade, measuring parallel to the railroad and about 100 feet to the south, between the high points of the water surface or marks made by the high water. He stated the distance was about 2600 feet, and at First Avenue South the distance across, the width of the high water was 2400 feet I believe. I went up the creek and measured and had pointed out to me places that are still in evidence where the surface of the water had made the marks, were wider in many instances than 2600 or 2400 feet. I saw

(Testimony of B. C. Lillis.)

places that were measured by the railroad company engineers and I checked conditions on the ground, and I am in a position to know they were correct, and they were 2900 feet; and up at Frank Miesolski's is a place it is about 4,000 feet. Then I came to the conclusion that it was lots of places, that wide or wider, way in the creek. The depth according to Mr. Lyman, was 19.9 feet at the railroad bridge at Wibaux. I also measured a number of places up the creek for miles, where the water had risen as high as 22 feet. So, there is nothing in the evidence to indicate to me that the railroad had raised the water any; in other words, there was nothing unusual in the town of Wibaux other than what was occurring up the creek.

By Mr. Baker: (Juror). Q. Was there any difference in the width of that water at Massey's place than it was down at the green house—difference in the width of the stream?

A. Yes; the water as testified to by Mr. Lyman and also by the railroad company engineers, at Massey's place, it was about 600 feet wide. As it reached the green house the [496] banks are only 6 or 77 feet high, and it spread out over a greater width.

Q. Would that make any difference in the depth of the water?

A. It might or it might not. It would depend on how fast the velocity changed. The velocity might have slowed up just so you might be able to keep

(Testimony of B. C. Lillis.)

the depth of the water the same. And the testimony of Mr. Lyman indicates that that is what happened. The water at the green building was 2640.6 and in the creek somewhere near there, it was testified to or agreed to 2626.—something; there is about 14 feet difference.

I believe that covers the comment I wanted to make as to the reasons for my conclusions.

I computed the number of cubic feet per second that went through there at the time of the flood. I computed the quantity at quite a number of different places in order to see about how they averaged. The quantity which I considered the most accurate, and the reason I emphasize, it was figured at the point on this relief map about as I have shown on the map here—just below Massey's, crossing the map about as I have shown, and it is 600 or 700 feet down the creek from—no, here is the place—to what is known as the "horse island" there. The first reason I feel that that cross section is right at all is that it is nearly at right angles to the direction of the flow of the water, as testified to by Mr. Massey; it is quite a uniform cross section,—there is not much brush,—not many trees in this section of the creek at that point; and that it is at a point where several points of high-water elevation had been determined close by; and computing the quantity at that point, I figured the quantity of water flowing by there was about 36,000 cubic feet per second. As to how cubic feet

(Testimony of B. C. Lillis.)

of water per second is computed; it is determined by using two factors,—the size of the area or cross section of the water,—multiply that by the speed of the water. [497] The speed or the velocity of the water is determined in accordance with certain formulae, and as one of the factors in connection with the use of one of those formulae it is necessary to get the slope of the stream you are measuring.

Q. Did you hear Mr. Lyman's testimony that he got the slope by taking the elevation at a point where he was measuring in the vicinity of the Massey ranch and the second point he was downstream in the vicinity of the Miller house? Did you hear that testimony?

A. Yes.

Mr. MAURY: We say your statement as to what Lyman says is not correct.

The COURT: You will have an opportunity to show it is not correct.

In getting your slope, as to whether you should take a point below or take a point above, will say that you consider all of the conditions existing in any case of course, but in general, to get the real grade of the water which is the fall of the surface, you take a point at the point you are considering the cross section and then use the point wherever the conditions were the same, above or below. In a restricted area like that at Massey's, the velocity at the section referred to was influenced more by

(Testimony of B. C. Lillis.)

the grade of the water above the point than it was below. So it would be more accurate to determine the real grade of the water, to take a point above Massey's than taking a point where his section was taken.

Q. Did you notice the testimony that the reporter has read with reference to his having taken points in the bed of the stream—two different points, for the purpose of ascertaining the grade, slope, and in the last answer here you spoke of the surface of the water. What is proper, in your opinion, in ascertaining the slope,—to take the two points in the bed of the creek, or to measure the difference in the elevation of the water at two [498] different points?

A. The proper way is to refer to the surface of the water; that is the hydraulic grade, that is the amount the surface drops.

Q. Juror No. 12 (Mr. Baker?), asked you a question here. Where was the cross section on the relief map that Mr. Oien used and which you got the 600-feet, point out approximately where that was.

A. It was running from near the Massey barn with the direction amost parallel to the channel of the creek at that particular bend not quite west of there. I don't know whether I can explain it any more fully or not, or comment a little more fully on the question propounded to me by Juror No. 12 (Mr. Baker)—as to the amount of water coming down there past Massey's and the effect of pass-

(Testimony of B. C. Lillis.)

ing over the area before it reached the town,—but it is apparent from the position the ruler is on the map, the water was coming through a section where it was restricted to that 600 feet by the height of the banks on either side. As it passed that point, the valley widened out, and down in the section where I computed the flow the water surface measured only 1700 feet on top; that is only 660 below where it was at Massey's; the point is 1700 feet wide across the surface of the water. The difference between the 1700-foot width and the 600 feet was about 1100 feet. As to whether that water would or would not go into the town in between the city water tank and the green house—along in there, will say there was nothing else it could possibly do; considering the direct flow, the height of the bank at the city water tower, about 7 feet of that water would have to go on through the town. As to whether I would want to say that all of that water, or part of it, or what would go into the town there,—it is clear what would happen; the water below that 7-foot elevation would be deflected by the bank and on east and on down the portion of the creek; that portion above the 7 feet would come on down through the town. [499]

Q. Would any of it spread out so that additional 7 feet would be lowered, or what would happen in your opinion?

A. As it reached the portion of the town the buildings begin to be closer together, it would have

(Testimony of B. C. Lillis.)

a tendency to be thrown to one side of the buildings. For instance, the first block north of the Mattie Miller house, then there are buildings built almost the full area of the block,—same thing as a dam. Then when you get down to the block Nick Wagner's building is in, it is practically a solid dam on the east side and practically a solid dam on the west side. The tendency would be to throw the water both ways and shoot it down the street. Now, the juror was asking about the depth of the water. The depth at the Mattie Miller house might have changed considerable due to the area of the cross section,—if conditions had been right, it might have been—but the testimony shows it didn't change materially; the testimony shows it was about 14 feet still. As to whether a flood of the proportions of the one that struck Wibaux on June 7, 1929, could be taken care of by any railroad bridge, so far as damage south of the town and so far as the railroad embankment is concerned, will say that all the analysis I can make from all the facts assembled, makes me say that the condition on that portion south of the town would have been practically the same if there had been no railroad embankment there at all.

Cross Examination:

(By Mr. Maury).

I didn't say that I had read all the testimony that had been given in these cases; I said I had

(Testimony of B. C. Lillis.)

heard the testimony. I don't believe I said that I had read the testimony. I have read some, however. I did not base my opinion partly on testimony that I have read. I read part of the testimony of one Dean Shenehon, given at the first trial.

Q. And did you read the portion of his testimony appearing on [500] page 967 of the record which I hold in my hand—

Mr. McCarthy: Objected to as immaterial, if the Court please. This witness was not a witness in the Heckaman case and what he read——

The COURT: Well, the witness says he read that testimony and in his study of the case,—is that correct? Did you read that testimony?

Mr. McCARTHY: May I ask a question as ground for my objection? (Mr. MAURY): We object, after the Court rules.

The COURT: I will permit him to,—as to on what he bases his opinion for the testimony in this case.

Mr. McCARTHY: Q. Did you base your opinion upon any testimony that was given by any witness, whose testimony you may have read, as given in another case?

The COURT: I understood he said “from what he had read.” Overrule the objection.

Q. Did you read: “Question: Dean, what sized bridge would have taken the flood of——”

Mr. McCARTHY: I object to counsel reading that testimony——

(Testimony of B. C. Lillis.)

The COURT: Let him submit it to the witness and let him read it.

Mr. MAURY: Read line 13——

The COURT: Read it to yourself first, if you want to.

(Witness reading): “Q. Dean, what sized bridge would have taken the flood of 1929 at the same level as the flood of 1921 rose to—what length of bridge? A. Including the viaduct?”

Q. Well, including the viaduct, we don't admit that anyone can use a county road for a spillway, but leaving out the viaduct, Dean. A. I don't believe I could give you that very definitely. I might say if the flood of 1929 was three times or $2\frac{3}{4}$ times, we would need a bridge and viaduct two or three times— $2\frac{3}{4}$ times the length. I shouldn't say for bridge alone. I would say [501] under the extraordinary conditions of 1929, it is entirely proper some water should flow through the viaduct.

Q. How much of a bridge would we need? A. You mean assuming there was no viaduct?

Q. First, assuming there was a viaduct there. Assuming that the same viaduct that was there then in 1929. You see, the viaduct has been changed now too. A. Well, I think if we say that if we had a viaduct capacity plus the bridge capacity— $2\frac{3}{4}$ times the capacities we had in 1921, it would have carried the water.

Q. Yes, sir; and without any loss or damage to property in the town at all. A. No more loss or damage than would have occurred in '21.

(Testimony of B. C. Lillis.)

Q. And now, will you adjust the slide-rule there, Dean, and tell us what a bridge $2\frac{3}{4}$ times as long would have amounted to—65 feet— $2\frac{3}{4}$ times 65 feet, on the slide-rule, Dean? A. I am including the space between the abutments; a bridge 290 feet long, in the clear.

Q. Dean, will you adjust the slide-rule and tell us how much $2\frac{3}{4}$ times 65 is? A. About 179 feet.”

That testimony absolutely did not go into the making of my opinion. I understand that Mr. Shenelon was an expert for the Northern Pacific at that trial.

The dam which I spoke of, which the buildings made—some of the buildings—appears in plaintiff's exhibit 21; and the dam which I spoke of, that the buildings made, as to some of them at least, appears in plaintiff's exhibit 23 (counsel showing exhibits to witness). We are looking at the dam from the north side. The Pickering pool hall (which you pointed out to me at my request in exhibit 23) hardly constituted a part of the dam which I spoke of; that would be a portion of the dam, but not the part that struck the water; the south end of that block would be the [502] face of the dam the water would hit. I see some of the buildings on the south side of the block (in exhibit 23), on the east side of the street. They constituted the dam of which I spoke.

(Testimony of B. C. Lillis.)

I didn't take into consideration the testimony of John Presthus, the section foreman there, that the water stood 10 feet higher on the south side than it did on the north side of the fill; I didn't use any information like that in reaching my conclusions or in making my study. I simply used the testimony of your own witnesses to draw my conclusions. I didn't take into consideration the testimony of Mr. Oien that there was a different high-water level of marks on the north side of the railroad from what he found on the south side, and particularly at the Sutherland oil station; that didn't enter into the problem I was solving. I didn't take into consideration the testimony of William Lentz that there was a difference of 10 or more feet between the high-water marks at his place,—somewhat off the model, and the high-water mark at the Sutherland oil station; that didn't enter into the problem.

As to the exact factors that went into computing the amount of water at the cross section here, north of Massey's, which I spoke of,—the factor of width was about 1700 feet; the factor of depth—that is a varying factor, it would have to be worked out. It wasn't averaged for me by Mr. Oien; I figured it myself from Mr. Oien's cross section, which is in evidence here. My factor for "A"—"A" for area—was 9290 square feet; I used a factor for "N" of .05; the factor for "R", 5.3 feet, and the factor for "S" is .00125. I applied Kutter's formula to determine the volume of water at that cross section

(Testimony of B. C. Lillis.)

that flowed by at that cross section on the morning of June 7th.

Q. Mr. Lillis, will you apply the same factors, except the factor "A",—take the factor "A" from Mr. Oien's cross section, defendant's Y-4. It is on First Avenue South in the town,—and tell [503] us what results you get? Here it is. That is the section on First Avenue South?

A. I have figured that out Mr. Maury, but I wouldn't use it. The result that I got when I figured it out was 32,000 cubic feet per second. I didn't use the same factors with the exception of "A"; you can't use the same factors.

Q. Now, will you use the same factors, with the exception of "A", and taking "A" from Mr. Oien's plat, tell us what results you get?

A. I wouldn't have any confidence in those results.

Q. Tell us. We might have confidence in it; and somebody else. Take those same factors.

Mr. McCARTHY: We object to that. The counsel might just as well ask him that assuming that four plus four equals ten, and so and so. We object to it as being an improper question.

Mr. MAURY: We will show that the grade was the same right there as it was up where he took it, and that the same factors should be used at both places, approximately.

A. I would like to explain Mr. Maury, why I can't use it. There is the highway bridge that wit-

(Testimony of B. C. Lillis.)

nesses testified was obstructed during part of the flood. There is all those buildings to the west of the highway bridge. While you would get a depth in an area of water, there is no way of figuring accurately the water in the entire cross section; it might have had a hundred different velocities. I didn't have Mr. Oien compute for me the exact area that should be deducted from that; I didn't have him do that for me on the cross section on First Avenue South, of the flood of June 7, 1929,—I haven't had Mr. Oien do anything for me. I did observe this cross section and observe the figures on it, if that is what you mean? And my cross section up here 600 feet or more south of Massey's was from a survey Mr. Oien made for me; and he gave me a survey down here on First Avenue South, and many others. There isn't just as much reason for using a survey and figuring the amount of water flowing by this cross section [504] that I have in my hand as there was at this point up here; I would say that there is not sufficient similarity of conditions of the two places. As to whether one of the conditions that would not be similar was that there was water flowing backwards here, will say that I had no understanding that that was the case.

Q. You didn't get it from any witness that there was water flowing backwards?

A. If water came down that stream, it never turned around and went back up; that is against all laws of nature.

(Testimony of B. C. Lillis.)

Q. Do you recall at the door of the courtroom now used by Judge Goddard, 27 years or more ago, while a case was going on against the Montana Power Company, telling me that in all cases, water, when obstructed by a dam of any kind, was backed up beyond the contour level?

A. That wasn't the same kind of a case or condition. I don't remember telling you that, but I remember what the case was; that was a case of a dam across the river and water going the whole length of the crest,—that is an entirely different case.

Q. And in that case, you told me there was always back-water beyond above the level of the contour?

A. If you mean by the "level of the contour" the "crest of the dam", yes, that is true.

Q. And you told me that that existed usually in large streams—how this was said to be on June 7th—three or four hundred yards above the point where the level of the dam would stop, did you not?

A. Of course, I don't remember my words of 27 years ago, but the conditions would have to be analyzed in each case, Mr. Maury. There is such a thing as back-water beyond the level of the dam; and it extends frequently in many cases, a considerable distance upstream, and the distance that it extends upstream depends on the local conditions. If that back-water is not apparent to an observer,

(Testimony of B. C. Lillis.)

it is true that it is determined by scientific measurements. An observer can't tell that just by looking at it,—of measurements,—oh, he can see the results or effects, if it is marked, but he can't make any exact measurement with [505] the eye of the level of the dam and he can't make any exact measurements of where that level would be upstream, so that back-water is always subject to analysis and opinions from text books—well, it is a rather complicated problem.

Q. Did you in using Kutter's formula, using the same factors except that you used the area of the cross section at First Avenue South instead of the area up here 600 feet north of Massey's, and find that according to those figures, the flow of water past First Avenue South was 87,000 cubic feet per second?

A. No, sir. As to what I did find, I am just referring to my notes on it.

Q. What was it? Well, did you make any computation using all the factors as the same for First Avenue South, except the area, or did you not?

A. My figures show that I did not complete the computations. Oh, by the way, I see some more figures here Mr. Maury; I would be glad to give them to you. This is section 11, is what it is called; that is the cross section at First Avenue. The computations at that section that I figured shows 46,000 cubic feet per second passing that point, but I didn't use them and wouldn't use them, because of all these obstructions and interferences which

(Testimony of B. C. Lillis.)

changes the direction of the current. As to whether I had no belief that 46,000 cubic feet ever passed that cross section or not,—well, it didn't make much difference whether it did or not.

Q. I am asking you Mr. Lillis, you had no belief when you got the result of those figures there, that 46,000 cubic feet of water ever passed that point per second, on June 7, 1929?

A. Well, I didn't consider very seriously whether that was the figure or not, because I understood all the conditions which made that figure inaccurate and unreliable, and I decided not to use it. As to what the conditions were that made that figure inaccurate and unreliable, well the highway running east from the bridge I consider like a weir; the water went over that. Whether that would stop [506] it or push it faster, will say it had both effects; and then the bridge itself is an irregular cross section. It was testified that water came from where the parsonage was and flowed east and then to the bridge.

Q. What was the grade that you used when you made that computation?

Mr. HALL: If the court please, we think the witness should be permitted to finish the answer. He was trying to explain it.

A. The grade I used was what we called .007. That is one point greater than Mr. Lyman used on his computation at Massey's. I didn't get that grade from Mr. Oien; I took the elevation of the high-water at two points as near as I could there, I

(Testimony of B. C. Lillis.)

don't remember what they were; I can reduce that grade for you to feet-per-mile; it is about 3.9 feet to the mile. I did, in my reading and hearing of testimony given in this case, take into consideration the width of the high-water mark at Burke's place. As to what figures I took for that—the width—I will say that I worked out an area (I don't show the width across the top here; I took it off of one of these cross sections); the area was——

Q. A cross section for Burke's place?

A. Yes. The area of the water at that point was 4427 square feet; the maximum depth was 16.4 feet. I mean by that, the rise of water above the low-water in the creek; the velocity was $4\frac{1}{2}$ feet per second. The discharge I computed was 35,000. I made a computation at this point which I speak of below Massey's; I made that 36,000, and I made a computation of some kind at First Avenue South and I got a result of 46,000. I think practically all of the water that went by First Avenue South came by my cross section 600 feet north of Massey's on the day of June 7, 1929,—I don't remember that anybody saw any—don't remember whether anybody saw any coming down Possum Hollow at that time or not. All the water that came by my cross section 600 feet north of Massey's, came [507] down by Massey's, and all of that water came down by Burke's, except what came in the small drainage area—what is known as number 12. At Burke's P was 420; reading what the last three

(Testimony of B. C. Lillis.)

figures were of the computation at Burke's—you wish the factors "A", "V" and then quantity, "Q"? "A", area, 4427; "V", velocity, $4\frac{1}{2}$ feet per second; "Q", quantity, 35,000. I didn't get the result by multiplying "A" by "V"; I got the result by averaging that section with the next section below it. The next section below that, that I am talking about, is one that is number D-5.

Q. And whereabouts would it be? I doubt if our exhibit numbers fit into that number.

A. No, it don't; it was below Burke's about 3,000 feet; by "below" I mean down the valley. I don't know whether that is in evidence here. Those two I believe I averaged together to get 35,000.

Q. Now, what was the factor for Burke's alone?

Mr. McCARTHY: Q. The answer—what did you add from Burke's? You added two things together?

A. 4427 and 7447.

Q. You added those two together?

A. And divided by two, and that was my factor?

Q. And the factor "A" which brought out 35,000 was not 4427, but was the average of 4427 and—what were those other figures 3000 feet away?

A. It is about 3000 feet. The two figures that I added together to make the average area that I used in computing the flow by Burke's were 4427 and 7447. Of course, that wouldn't give the flow at Burke's independently; it would give the average in those two sections. I didn't use two sections down below to get an average flow here, 600 feet north. I

(Testimony of B. C. Lillis.)

didn't use two there because I didn't need to; I had one good section and I had elevations on the top of the water at two places very close together—they weren't 3,000 feet apart. As to whether Burke's was not a [508] good section, will say that it would have been a good section—it would have been like that one at Massey's if I had an elevation upstream from Burke's but I didn't have it. I would like to have had an elevation upstream and downstream both, to have had much confidence in those figures.

Q. Then at Burke's you did not use just the slope downstream, or did you use it and weren't satisfied?

A. That is the idea; I didn't report my figures, because I wasn't satisfied with them. It possibly would have led to greater correctness, I would have felt, if I had a measurement upstream from that point as well as downstream. I used a grade-per-mile in that computation at Burke's; the grade-to-the-mile that I gave was a little over 7 feet. I don't know as you can give the average fall of that stream to the mile; it is different as it comes down the valley, and as the valley widens and narrows, it varies all the way along. I don't remember whether Mr. Oien and I talked or discussed about what he considered the average fall of that stream from Brophy's to the railroad fill, or not.

Q. Would you say that the fall of the river bed at Burke's was steeper or not so steep?

A. You mean the bottom of the river?

(Testimony of B. C. Lillis.)

Q. Why, I mean the water at low level, at low-water.

Mr. McCARTHY: Compared with water at what level?

Mr. MAURY: No, you don't compute the fall of the stream per mile by water at low level; you compute it with water at low level upstream and water at low level downstream.

A. Well, I would have to say that in computing the water at the time of the flood, you compute it from the water surface during that flood. If there is no back-water, that level would not be substantially parallel with the level at low-water; there would be a difference varying with the change in the width of the valley at the different points, and that changes rapidly—quite suddenly. As the valley narrowed up, the level of the water [509] would not necessarily rise; the tendency would be to rise, but it would be dependent on the way the banks confined it and how the cross section changed; it might continue to be the same depth exactly and change its velocity two or three hundred percent. My observation of the creek channel and banks at both places,—Burke's and Massey's—indicates to me clearly why it was that, according to Mr. Oien's figures, the rise of water seems to have been greater at Burke's than it was at Massey's; the water was confined at Burke's between high banks that were only a little over 400 feet apart; at Massey's, they are about 600 feet apart.

(Testimony of B. C. Lillis.)

Q. Yes; and as it spread out, then the rise grew less?

A. No; that was influenced by the natural variation in the grade of the creek and natural width—in other words, it followed the line of least resistance, always.

Q. Always? And now tell us why the water would not slow up at the cross section to the north of Massey's from what it would do as it passed by Massey's?

A. It undoubtedly did slow up. From the contour of the land there as I have seen it, as to how much in my opinion it did slow up (you realizing that accuracy on that is impossible, and just wanting my opinion), I would say it slowed up something in the vicinity of one foot per second in its speed, in about 660 feet.

Q. And if it was going, (I don't know what it was going at Massey's), but if it was going four miles an hour at Massey's—that would be six feet per second—then when it got 600 feet further down, it would be going five feet per second or——

A. Approximately that. When the water got below my cross section—the cross section 600 feet to the north of Massey's—there was nothing to the east in general that turned the water in a westerly direction; the direction of that water continued according to Mr. Massey. According to Mr. Massey, the direction of that water continued approximately down towards that water tower from his house irrespective of those [510] curves of the

(Testimony of B. C. Lillis.)

creek, because it wasn't following the curves; it was filling the whole valley. Where I took my cross section the average is about five feet across that flat.

Q. Did you get an average here? (I am going to call that the cross section "M"; that is the cross section to the north of Mr. Massey's), how many feet is that?

A. It is about 660 feet. At the cross section M, I can't give to you the average depth—in an average, because——. I spoke of an average depth of five feet; that is about what it was across the flat.

Q. Yes; from high-water mark to high-water mark of June 7, 1929, that is the average you intended to convey to us?

A. Yes. That was not the average which I used to compute the area; I computed the area by getting the depth at each point where the slope changed; they probably averaged 100 foot apart and I took the depth at each one of those points. For my computation I used mostly rectangles, but I did find that I had to use triangles as I came to the bed of the stream. As I went up from the bed of the stream I didn't also have to use triangles,—I think they were all rectangles,—no triangles there. It wouldn't have been a little more accurate to have used triangles on the bottom, no.

I recall the contour of the ground by the Cramer house (you are pointing to a house between Massey's meadow and the Ostby house—that one with the dyke there). I don't remember the elevation of that ground through there by the Cramer house.

(Testimony of B. C. Lillis.)

Q. As you stood here viewing your cross section, can you recall how that looked, and whether you could see Ostby's or this house to which I am pointing—this Sletten house that has been identified—whether you could see this point here or the Sletten house, or Ostby's, when you were working in Massey's meadow?

A. No, I don't remember that in detail; the country appears just as it does on that relief map; it slopes just as it is done there.

Q. And you have found that the elevations are usually done with [511] exceedingly great care?

A. I haven't discovered any error in it. The elevations are as near correct—as nearly as people in the engineering business can make them, and I think at the cross section M or any point on the cross section M, you can see Ostby's house where those hills are around here, or Sletten's house; I think I could see across there; there is not a whole lot of difference in the slope, and speaking about the elevations here at Cramer's house and whether that is to the north of the cross section M, will say that it is about as shown on that map; that is about correct. I didn't get any at Cramer's house; as to whether any were submitted to me for the one of June 7, 1929, will say that is a point I didn't pay much attention to that I remember of.

Q. Mr. Lillis, is there anything in the ground there that you could see, or any figures that you got from Mr. Oien or anyone, that changed the grade

(Testimony of B. C. Lillis.)

of the stream from the cross section M to the point right by the water tower,* I mean is the ground of the stream from about opposite Massey's place to the Senator Kinney dyke,—is there any great change in the grade of the stream from between those two places?

A. I know that from the section I took, down to the Kinney house, there wasn't any appreciable grade in the surface of the water during that flood.

Q. Certainly, there was no appreciable change in the grade.

A. I mean change of grade.

Q. Surely. Did you hear Mr. Oien's figures giving about what the grade was from the Mattie Miller house—the green house—back up around the meanders up to the Massey place?

A. Yes. So far as I know, they were correct as he gave them. I believe I heard the figures given by Mr. Oien for the change in grade, or rather the fall of the creek, from Mattie Miller's around to the county bridge. As to whether I accepted them in all my calculations as being correct, will state that I didn't use those figures in my calculations; I used Mr. Lyman's figures. [512]

Viscosity, I think, would be the tendency of particles of fluid to cling together; capillary attraction is a different phenomena; it is the tendency of different kinds of material to cling together; drops coming out on a glass of ice-water, that is condensation, and not done by capillary attraction.

(Testimony of B. C. Lillis.)

Q. Mr. Lillis, you mentioned in your direct examination using a factor and saying that Mr. Lyman said that the elevation of the rise of the water at Massey's was 14 feet. If Mr. Lyman actually said it was 11 feet and a fraction, would that change your calculations and your opinion?

A. My computations are based on the actual elevation of the surface of the water as given at that point by Mr. Oien.

Q. But you said you took into consideration that Mr. Lyman had said it was 14 feet at Massey's and you differed from Mr. Lyman,—didn't you say that on direct examination?

A. I understand Mr. Lyman says the depth was 14 feet.

Q. That is what you are basing your report on is it?

A. That is one of the factors. I measured that myself and I checked it up myself, and I know it is true.

Q. If Mr. Lyman did actually say the rise at Massey's was 11 and a fraction feet that would change your views from his wouldn't it?

Mr. McCARTHY: May I ask? I think counsel is confusing the depth of the high-water raise and low-water,—I think it is confusing.

The COURT: Well, straighten him out on re-direct examination.

As to whether a wave moves any water forward, except a tidal wave, or whether it merely lifts it up, will say there are two kinds of waves,—there is

(Testimony of B. C. Lillis.)

the kind that lifts it up, and there is the translation that actually moves the water horizontal.

Q. In fact, a wave may cross the Atlantic Ocean in about seven hours and a feather that struck in midocean, would not be moved forward two feet?

A. I don't know.

Q. Just rise up and down. [513]

A difference of 3 feet, or an assumption for my calculations, in rise of river at Massey's would make some difference in the amount of that overflow that I described in going over the town; it might make 3 feet difference, and might make another difference because, as the altitude of water increases, so does the speed. Burke's house is on the same side of the creek as the plaintiff, Nick Wagner's property; I know that no water did get into Burke's house. Two miles or more, probably something like that, south of Wibaux is Clem Parker's place—3½ or 4 miles south of Wibaux; I went to that place and asked where the water was; I believe that no water on June 7th, had entered Clem Parker's house—I am not positive about that—I believe not. That isn't part of the information upon which I gave my opinion this morning. I don't know how close a cross section was taken to Parker's. I don't remember noticing any house over there right across the creek from Massey's on the west of the bank there; I didn't go to that house and inquire about water marks—I didn't see any house there, but there may be one; I don't know a

(Testimony of B. C. Lillis.)

house that was occupied, and occupied now, by Mr. and Mrs. Coyne,—I didn't go to the house. I didn't figure it at that one cross section at Burke's place—using Kutter's formula to get a flow of about 18,000 cubic feet per second—because I didn't have enough information to figure that one cross section at Burke's; I had all the information including the elevation at Burke's; the elevation at Burke's with respect to rise of water—the height that the water rose at Burke's first, I think was $16\frac{1}{2}$ feet. Other information that was useful for Kutter's formula that I had at Burke's, was the area,—it was 4,000 and something,—4427 was the area shown inside of the cross section that was given there. I think the reason I didn't use that Mr. Maury, I found out after I got on the ground, there was a lot of water going through a swale to the west that the cross section did not [514] include. That area was on one of those cross-section plats that Mr. Oien prepared. The velocity that I used at Burke's, as near as I could get at it with that information, was about $4\frac{1}{2}$ feet per second; I had to assume that by taking another section—that is what went into this, $4\frac{1}{2}$ feet per second at Burke's. That area multiplied by that velocity, would be something like 20,000 cubic feet,—coming closer, 19,800. It is possible that I could have gotten the dimensions of the water going through that swale at Burke's, but there was no way of telling what grade the water had at that point; there was too many indeterminate factors for

(Testimony of B. C. Lillis.)

me to figure the flow there and feel that I wanted to say "there was so much". As to whether much of the water in that valley sinks into the ground, will say that is quite a general question, Mr. Maury; water will sink into ground to the capacity of the ground to hold it. Of course, after long rains, the ground was pretty well saturated,—that was the condition that obtained at that time. In my consideration in regard to steady rain in that valley, I was going back just about one day's time; I know there was at least one day before the 7th; I had not inquired about climatic conditions for a week or two before; I wasn't interested in time previous to the day or so before; there is always though, a great deal of water sinks into the ground when it gets outside of the banks of the stream, that is a general condition, that is true. I didn't say that there was less water going by Massey's than was going by Burke's. I wouldn't say that the speed of the water at Massey's was slower than it was at Burke's on the 7th of June, 1929,—the information I have wouldn't indicate that it was slower. The grade I used at Burke's was 7 feet to the mile. I have taken into consideration the grade slightly above Massey's and slightly below. The grade that I assigned opposite Massey's place, I think was about 6.6 feet to the mile. On that basis then, there wasn't any substantial variation in the grade so far as I [515] got it, between the grade at Massey's and Burke's; the information I have doesn't indicate much difference. As to whether I would not say that the

(Testimony of B. C. Lillis.)

speed of the water at Massey's was slightly less than at Burke's, my judgment would be that it was, except that it is indeterminate of that portion at Burke's that was going out through the swale.

Q. You would say that it had a less speed than 3 miles an hour at Massey's, having given Burke's 3 miles per hour?

A. Now, in speaking of the speed at Massey's, I don't want to confuse the information I have given; the point I am referring to is about 660 feet below Massey's. Considering the information I had at Burke's, that speed there was not considerably less than at Burke's; I didn't find much difference—considering the information I had at Burke's. The information I had at the cross section M, I had the elevation on the surface of the water at two points within 660 feet of one another, and that is about five times as close as the points I had at Burke's.

Q. You spoke of the grade of that river in your direct examination. What did you say? What is your idea of the average grade of that river from the railroad bridge back up to Brophy's?

A. Well, now that is a pretty good question; I don't know as I can answer it. I have actual elevations at certain specific points Mr. Maury. Now, I had no reason to worry about what the average grade was. I have heard testimony here that it was about 12 feet per mile—the fall of the valley—that may not be “about right”; that may be “just

(Testimony of B. C. Lillis.)

right". That wouldn't be considered steep for a creek. As to what the difference is between a creek and a river as found in the United States terminology,—whether a creek is something that drains less than 100 square miles—will say that I never saw any exact definition of that type. And whether a river is spoken of in the Geodetic Survey as a drainage area of more than 100 square miles,—as I say, I don't [516] know; I never saw the definite figures applied. I think it is a general term. As to why I was speaking of the Missouri and its grade, I had in mind when I was speaking of points on the Missouri River between Great Falls and its head at Three Forks; you can't give an accurate average grade; it varies so markedly. Giving it at some of the places, will say that opposite the town of Cascade, it is less than 3 feet to the mile, I know that; there is points at Townsend where it is about 3 feet to the mile. Of course, some places, where there are cascades and waterfalls, that it is immense. I don't know about whether the Ohio River runs to Cairo about 4 inches to the mile.

The COURT: Hurry along with your cross examination. Let us get at the real facts here and develop something.

A wave is a vibration—vibration of anything you would call a wave; generally speaking, it is a vibration up and down, of water. I don't know whether a wave may run 700 miles up the Amazon without moving any water up the stream at all. As to whether waves as a general thing, will only move

(Testimony of B. C. Lillis.)

water up and down, will say there are waves of translation which will move water horizontally; they are tidal waves—or a wave of water coming down a creek would be called a wave of translation. I would have to see it to know—whether a wave going cross-wise of a creek would be a wave of translation or a wave of vibration. I know that the wind makes waves on lakes in Montana in very ordinary storms,—make such waves as turn people over in rowboats and drown them.

Q. Mr. Lillis, have you considered the testimony of Robert Massey that the water remained at the same stage at his house until 3:00 o'clock in the afternoon of June 7th, or approximately the same stage?

A. I heard him state how it fluctuated during the day.

Q. And if that testimony is accurate, how can you account for [517] there being no water on the streets of Wibaux at 3:00 o'clock in the afternoon—at least no water except mud and debris that had been left there?

A. Well, I don't know as I would attempt to account for that; that wasn't any factor that entered into the problem that I was analyzing this morning, whatever.

Q. Yes. And suppose that for 20 miles to the south of the railroad fill, or 18 miles, at 11:00 o'clock in the morning of June 7th, the water was still coming as big as the Yellowstone at Sidney,

(Testimony of B. C. Lillis.)

how would you account for that not creating the same rise of water in Wibaux? Did you hear the testimony of the gentleman in the airplane?

A. Yes.

Q. How would you account for the fact that that water, coming at the rate of three or four miles an hour by Burke's and by Massey's, did not cause the same rise of water at Wibaux that the previous water had?

Mr. McCARTHY: We object to that question on the ground that it is assuming something that Mr. Combes didn't testify to—namely, that the depth of the water was the same. The aviator didn't attempt to give any difference in depth during that period; he was just giving the general appearance.

The COURT: As I recall, he testified as to the appearance from his plane, of the stream or the area covered by the water.

A. I would account for that by the difference in the velocity of the water.

If the area of water in that valley remained approximately the same, the depth would remain approximately the same too.

Q. And the depth makes the velocity?

A. The velocity is influenced by the amount of water coming on behind it.

Q. Did you take into account in general, answering the general hypothetical question of counsel this morning, the deposition of Senator Kinney to the effect that six or eight times, the water had backed

(Testimony of B. C. Lillis.)

up to be a quarter of a mile on the east of the fill [518] while he lived there at Wibaux?* Did you take that into consideration?

A. I don't remember what the question was I was replying to Mr. Maury—you mean when I said there was no backing up? That the fill made no difference in my opinion, in the elevation of the water in Wibaux on June 7th? Well, what I was saying was, that the water had gotten over that part of Wibaux before it ever got to the railroad track, and it would have done so whether there was any railroad track there or not. I didn't take into consideration testimony that the water was going through the viaduct four or five, or even three, feet deep, coming from the east, and some coming from the west, before it got opposite Wagner's property at all; I didn't have to take that into account; I did not consider that. In solving my problem, that was all taken care of by the elevation of the surface of the water at the points which I used,—in other words, the surface of the water would have been and probably was, affected by all of those conditions; but I simply used the fall or drop in the surface of the water, which is the thing that determines the velocity and its flow. As to whether I took into consideration testimony that was read, of John Bailey, that water was backing up behind this building and came in from the north to the south, will say that I remembered that statement; I didn't take that into account,

(Testimony of B. C. Lillis.)

because I didn't feel I was justified in taking into account. I didn't take into account or consideration the testimony of Miss Webber, the telephone girl, who said the water stood behind the telephone office here coming up from the north to south for half an hour before it got onto the street in front of the telephone building.

Redirect Examination

In the course of my study I went down on Wibaux Street in the vicinity of both the Pickering pool hall and south of there, and also north of the railroad embankment in the vicinity of the community club or Congregational Church. The elevations [519] at those two places with reference to slope, will say that the ground falls to the north about five feet between the Congregational Church on the north of the track and the pool hall on the south of the track; the pool hall on the south side of the track is five feet higher than the ground on the north side. As you assume, water seeks its own level. If we put one foot of water on the ground on Wibaux Street in the vicinity of the Pickering pool hall, I wouldn't expect to find more than one foot of water down at the lower grade.

Q. And in getting the elevation of the high water north of the railroad embankment and south of the railroad embankment, is it in your opinion, proper to deduct the elevation to get a correct picture of the situation?

(Testimony of B. C. Lillis.)

A. Well, that should be taken into account, of course.

Q. Now, Mr. Lillis, you were asked on cross examination here about the difference in elevation in high-water level above and below the embankment. Having in mind that that is a fact, how do you reconcile the fact that if there was a difference in elevation of water on the two sides and your statement that the railroad embankment played no part in the damage at Wibaux?

A. I say the water had to go through the town of Wibaux before it reached the track.

Q. Mr. Lillis, you spoke of a 14-foot depth at Massey's instead of an 11-foot depth counsel insisted on at the Massey place. Now, have you checked over the exhibit as to what was accepted by Mr. Lyman? Have you a copy of that exhibit?

A. Yes. That shows that the water was 14 feet deep at the Massey place. So the record will be clear,—in making the last statement, I had in mind the defendant's exhibit D-11, with particular reference to the last two items on the exhibit. The first one is the elevation of the high water June 7, 1929, about 200 feet west of Massey's house; the elevation given is 2643.5. The second item [520] is elevation bottom of creek about 180 feet southeasterly from Massey's house; the elevation given is 2629.3. The difference is 14.2 feet—about 14 feet even, I think; I can't tell whether that last figure is 3 or 5; it is either 3 or 5; it is either 14.2 feet or 14; that is

(Testimony of B. C. Lillis.)

in the one-tenths. Assuming it is 3, there would be a difference in the elevation, or in the rise of that flood, of 14.2.

My attention was directed to testimony in the case by a witness named Shenehon, in answer to a hypothetical question. In looking over that testimony, in my opinion, all of the factors were not present, so to answer the question at present. As to what was absent: the fact of height of water in 1929 and 1921 and the speed of the water. By "height" I mean—that is the same as depth.

I was present at Baker, Fallon County, Montana, in District Court, in January of this year. I heard Mr. Lyman's testimony on direct examination in that trial. I recall of your requesting Mr. Lyman to accompany Mr. Oien and make some further checks as to elevations, and I was present when it was complied with, and also present when Mr. Lyman returned. As to what difference, if any, was found in the vicinity of the Massey place on return, after Mr. Lyman had checked his figures, will state that Mr. Lyman and Mr. Oien agreed that the elevations given in this exhibit D-11 were the correct elevations.

Q. Now, were those corrected elevations before Mr. Shenehon when he testified one or two years before the trial of the case this year?

Mr. MAURY: We object. Mr. Lillis isn't capable of answering that.

Mr. McCARTHY: This witness was asked about the Shenehon testimony this morning in the cross

(Testimony of B. C. Lillis.)

examination. I want to show where the error came in. [521]

A. Mr. Shenehon never used any of Mr. Oien's—Lyman's figures.

The COURT: Overruled.

A. Shenehon didn't have Lyman's figures; the figures were not corrected as to Mr. Lyman's elevations until January of this year. The extent of that correction with reference to high water at Massey's was three feet and a fraction,—three feet or three feet, plus; it was over three feet. Three feet on a volume of water would increase it greatly.

On cross examination this morning, I was asked about the average depth of water across the flat at the location of the section north of Massey's place. I think I answered approximately five feet. As to whether I was referring to the entire cross section or only to the flat, will say I was referring to the water-depth on the top of the flat outside of the creek-channel proper.

This morning, when asked on cross examination about the rate of fall between the Massey place and the bend of the creek, I think I said it was very slight; I didn't have reference to the difference in elevation; I was referring to the rate of fall.

Q. Mr. Lillis, if a creek like Beaver Creek, with a meandering course, got out of its banks so it meandered through the country like described by

(Testimony of B. C. Lillis.)

the various witnesses here, what have you to say with reference to the velocity or speed of the water when it got outside of the banks, cutting across, as compared with the time it would take the water to go around by the various twists and turns in the stream?

A. The speed of the water, when it got out of the channel and started right down the valley, would be much greater; that is, it would cover a mile of the valley quicker than it would if going on the meanders of the stream.

Some reference was made to a cross section which was introduced by the plaintiff, but which had been prepared originally [522] by the defendant, and my attention was directed to some computation by which we could get to some figure. As to whether in making that computation, which counsel insisted on me making, I had in mind the effect of the building construction, will state that I didn't take out the area of the building construction. In order to get an accurate computation, it would be necessary to take out the area of the building construction. It would also be necessary to take out the area of that elevated walk to the east of the county bridge.

Recross Examination:

Defendant's exhibit D-11 is what I mean by the "corrected figures"; as I understand it, these are the figures.

Q. Those are the corrected figures?

(Testimony of B. C. Lillis.)

A. The figures that had been corrected and had been agreed upon by the two engineers, Mr. Oien and Mr. Lyman, as correct. Reading what you have indicated on this exhibit: "Elevation of nominal low water Beaver Creek at Massey's cow shed 2632.2." Now reading these lines and those figures you have indicated: "Elevation of high water June 7, 1929, about 200 feet west of Massey's house 2643.5."

Q. Will you take the difference between 2632.2 and 2643.5?

A. Yes; but those points are not the same.

Q. Just take that difference and we will hear your argument afterwards?

A. 11.3 feet.

Redirect Examination:

I wanted to make some comment on the exhibit. I will make the explanation I wanted to make: The elevation taken for low water in the creek is one place and the elevation taken for the high water in the creek is another place; there is a difference in the elevation of the stream.

Recross Examination:

I can scale it off and tell it better than guessing, as to how far apart they were. One point is up at the cow shed and [523] the other is straight west of the house; it is a matter of probably 300 feet. These are not my figures at all; these are Oien's figures. As to how much difference there was in

(Testimony of B. C. Lillis.)

the elevation of the water 200 feet west of Massey's house at high water and what it was opposite the cow barn, I wouldn't attempt to say,—I would simply know what it was where it was measured.

Q. Would it be an inch?

A. Yes, it might be a matter of several feet, because it hit the bank where it turned there and turned and shot out to the west and it undoubtedly would have a lot of fall. I didn't make use of Oien's cross section at Massey's. I made it down where the conditions were uniform and not where it was subject to rapid changes. As to whether I surveyed anything there where Oien had a survey, will say that I measured the distance from the water to the top of the cow shed there—just to check it with Oien; Oien wasn't there at the time. I found no difference in his figures.

Mr. McCARTHY: If the Court please, during the course of the presentation of the plaintiff's case, we offered defendant's D-12, being a certified copy of the War Department report. I now offer defendant's D-12 in evidence.

The COURT: I can't see the materiality or competency of it. I will make the same ruling I did before.

Mr. McCARTHY: And the Court will grant us an exception, please?

BERNARD BLUM,

called as a witness in behalf of the defendant,
testified:

Direct Examination:

(By Mr. McCarthy).

My name is Bernard Blum. I live in St. Paul. My profession is civil engineering. Am a graduate of the Massachusetts Institute of Technology,—in 1904,—commonly called “Boston Tech”. [524] Since graduation I taught school for a year; was employed by the Chicago Junction Railway as draftsman, rodman and assistant engineer; then entered the employ of the Northern Pacific in 1907, and have been with them in various positions,—roadmaster, assistant engineer, district engineer and engineer maintenance of way and, since 1928, chief engineer.

I was acquainted with the bridge over Beaver Creek at Wibaux prior to the flood of 1929. Since that flood, I have made some study and investigation of Beaver Creek valley. I have been here throughout the trial of this case and I have heard all the testimony. As to the study and investigation I made of the Beaver Creek Valley, I have traversed the valley upstream and partly downstream, and across several locations, and have looked over the townsite and, you might say, numerous studies have been made under my direction in connection with the preparation of this case and previous cases on trial. The studies made by Mr. Oien, Mr. Clements—all those men, are under my jurisdiction.

(Testimony of Bernard Blum.)

Based on the studies to which I have referred and the studies made under my supervision which I testified to in Court, taking into consideration further the exhibits received in evidence, I am able to form an opinion as to the adequacy or inadequacy of the bridge over Beaver Creek immediately prior to the flood of June 7, 1919, at Wibaux. In my opinion, the bridge, as constructed prior to 1929, was an adequate opening for carrying the waters of Beaver Creek and a logical bridge to construct for such a stream.

Cross Examination:

(By Mr. Maury).

I have been a witness before in a case at Baker involving some of the same questions here.

Q. At a trial last September or early October at Baker, were you asked this question: [525]

Mr. McCARTHY: I suggest you submit it to him.

The COURT: Let him read it and see what he has to say.

Q. Did you make that testimony? (indicating).

A. That is as I recall. It is substantially what I said.

Q. Then, you testified there: "Q. Mr. Blum, what is an adequate bridge? A. An adequate bridge is one that carries—permits the water to pass through freely." You made that answer?

A. Yes, sir.

(Testimony of Bernard Blum.)

“Q. What relation has an adequate bridge to the banks of the stream—I mean the first banks?” You answered: “It may or may not be the same as the width between the first banks of the stream.”

A. Correct.

Q. I asked: “How long was the first bridge that was put there?” You answered: “137 feet.”

A. Correct.

Q. You were asked: “Do you refresh your mind from the plat?” Answer: “I do not.”

A. That is correct,—referring to the profile.

Q. You were asked: “What does the plat indicate?” Answer: “This plat shows the bridge that was there just prior to the 1929 flood.”

A. That is correct.

Q. And question: “And how long was that bridge?” Answer: “This plat shows that that bridge was 114 feet I think—114 feet long.”

A. That is correct.

Q. That was your answer. “Question: Was that the measure of adequacy? Is that what should have been there—an opening of 114 feet?”

A. I think I was.

Q. And you answered: “From the evidence up to June, 1929, that was according to good engineering practice, was an adequate opening.”

A. The same thing I have just said now. That bridge was an adequate opening, yes, sir.

(Testimony of Bernard Blum.)

Redirect Examination:

I recall the bridge I think, that was in place at Wibaux over Beaver Creek, immediately prior to the flood of June 7, 1929. As I recall, he said that the 70-foot plate girder—the central [526] one—over all was 71 feet 9 inches long, and that bridge had two approach spans as I recall, he said, each 20 feet long, but that is measured center to center of bearing, and the entire bridge,—I don't recall whether he said how much it was—but I know that bridge was 114 feet long. When I was testifying at Baker, and as to the part of the testimony referred to by counsel a minute ago on cross-examination, when I spoke of a bridge 114 feet, I am referring to the bridge shown there prior to June 7, 1929, as shown by that model; that cannot be changed. I also referred to the profile which counsel for the plaintiff showed me, and I took that measurement direct from the profile, which shows 114 feet long.

Recross Examination:

Q. Did you take into consideration that in 1921, there had been a portion of the track washed away east of that bridge?

A. I couldn't take such a thing into consideration, because it wasn't washed away. Whether I took into consideration that that bridge had been injured by a previous flood, will say that bridge never had been injured by a previous flood—never to my knowledge. I can't answer that directly,

(Testimony of Bernard Blum.)

whether there had ever been any repairs on that. If you mean by that,—possibly some repairs to riprapping, which is frequently done,—but I don't recall any repairs to the bridge itself.

Q. Did you take into consideration a high-water mark on that bridge 7.3 feet below the top of the ties——

A. What is the answer

Q. And say that was an adequate bridge for all conditions that existed there before June 7, 1929?

A. I had previously, during the same period on the stand, said that in my opinion, that that was an incorrect record. My previous testimony, possibly half an hour before that statement, made that correction, yes, sir, I therefore, took that into consideration.

Q. Then you consider this record D-24 untruthful as to the words [527] or the letters "H. W. 1900—7.3"?

A. As I testified in the September-and-October trial, I had investigated that and am convinced that that record is stated erroneously.

Q. Then, if that record is stated erroneously, you had no permanent record of that bridge before you since 1893 had you? I mean permanent record of high-water marks.

A. We had 1893, 1897, as I recall, and of course, 1921. 1897 is right here (indicating on exhibit); that water mark in 1897 was 10 feet 8 inches below

(Testimony of Bernard Blum.)

the base of rail. This record clearly refutes your statement that "it was the custom to not place any water mark that was not so high as a previous mark." It has been done; it is done there.

Q. Did I understand Mr. Clements on the stand, to say that unless a water mark was higher than a previous water mark, that it is not placed on this permanent record?

A. Usually, it isn't. Mr. Clements testified correctly. You asked a direct question and I answered it from the record. This record so states that for this, there was a lower mark placed on here than the previous one for 1897.

Q. Then there really wasn't much of a rule or custom about that at all?

A. Yes; there has always been a rule or custom.

The high-water record of 1921 is shown here (referring to exhibits, photostatic copies). It is shown as 11 feet below base of rail. As to whether that was higher or lower than the 10-foot record, considering the difference in elevation,—you see, the bridge was raised in 1898. Therefore, the 1921 high-water record is a higher record than the 1897, yes, sir, therefore, it was shown on there in accordance with practice and custom.

As to whether a bridge which backs up water is adequate, will say that we have a number of openings that are adequate that back up water and discharge under a head. Generally speaking, a bridge of this type—I am talking now not about

(Testimony of Bernard Blum.)

this bridge, but some other—this is a hypothetical question—but a bridge of that type, [528] we would not design it to have water impinge against the sides of the girder,—if that is what your question means.

Q. If the bridge is so narrow that it extends water to the east of the bridge, on the side of Beaver Creek, is that an adequate bridge?

A. Ordinarily speaking, it is not; but it might be in some cases.

Q. And if this bridge is so narrow that in ordinary recurring high-water periods, it backed up water, formed a horseshoe and around the town, and ran down the swale, would that still be, in your mind, if that testimony is true, an adequate bridge?

Mr. McCARTHY: Objected to as not proper evidence.

The COURT: He is propounding the question, based on his own theory from evidence he has introduced. Overrule the objection.

A. I have heard no such testimony as that.

I may say that I didn't believe the testimony of Mr. White, that "the creek had a custom of water stopping at the bridge, that is in ordinary recurring high water, backing up under the county bridge, forming a horseshoe and going down the swale."

Q. If that testimony was true, then that bridge would not be adequate?

A. Well, I just say in general, if any bridge did such a thing as that, you might question the

(Testimony of Bernard Blum.)

adequacy of it. Whether such a bridge was adequate or was not adequate in my opinion, will say that I would have to know all the circumstances, but in general terms, to get through with this, if such a thing recurred, it would be questionable if it was adequate. * Of course, if we make an assumption that certain things happen which may not have, we will have to come to a natural conclusion in keeping with such things. We might say that we may consider—any bridge may be considered inadequate under such conditions.

Q. If that bridge did back up water 1200 feet six or eight times and made a horseshoe around the town and water ran down the swale, [529] why that bridge was not adequate was it?

A. Possibly not; probably not.

Q. Mr. Blum, you made an examination of Wibaux soon after the 1921 flood?

A. I was there, yes, sir.

Q. And did you go there soon after the 1929 flood?

A. Not immediately, no.

Q. Do you know whether more of the town was covered by water in 1921 than in 1929?

A. More of the town covered in 1921? Will you show me what part of the town?

Q. Davis Addition; region of the swale; Mrs. Edighoffer's laundry; the region near the lumber yard; the water tower.

A. In 1921, to my knowledge, there was no water

(Testimony of Bernard Blum.)

over the streets or around the buildings of Wibaux proper. In 1929 the most of the town, it is so indicated, in the vicinity of Wibaux Street was badly flooded; that is there was considerable depth of water over it. Therefore, it is patent that the 1929 flood covered far more area of the town than could have occurred in 1921. In 1921 there was a severe storm to the southeast of Wibaux and the water came down what has been called Possum Hollow and, in running off, ran around a number of the houses apparently in the draw near the mouth of Possum Hollow, and came across the elevator tracks and washed out a portion of the same and then ran off peacefully into the creek without any further damage.

Q. How far did that storm extend east along the Northern Pacific Railway?

Mr. McCARTHY: Objected to as immaterial.

The COURT: I believe he said it extended for a great distance.

Q. I want to know what he means by "great distance."

A. In my answer I was referring to the water that came over the Davis Addition, and from my observation, going over that territory, it apparently ran back there I would say two miles or so,— [530] two or three miles—that water came down Possum Hollow. As to the area of the town—the town limits—I would say that in 1929, unquestionably, a much greater area of the town was covered with water

(Testimony of Bernard Blum.)

than there was in 1921; there is no question about that.

Redirect Examination:

Q. Counsel, on cross examination, asked you a hypothetical question here and asked you to assume the water backed up the creek some way and ran around and formed a circle—a horseshoe I think he called it. During your years as engineer, and including your various capacities, and as chief engineer and your study of the records, did you ever find such a condition?

A. No such condition ever occurred to my knowledge and experience, at Wibaux.

I don't believe I am qualified to answer whether the measurements were made at that bridge for a good many years by John Presthus. The measurements are sent in by the District Engineer and the Assistant Engineer. The section foreman may show to him marks, but it depends upon the Assistant Engineer to satisfy himself from the visual conditions. It is always clearly indicated where the water mark is. It is self-evident that the Assistant Engineer cannot be at four or five bridges at the same time. So he has to take the point on the record, pointed out by the section foreman in many instances, and the conditions on the ground which are clearly visible. I wouldn't say that he had to take his information in the first instance from the section foreman frequently; he confirms it.

SAMUEL MURRAY,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

My name is Samuel Murray and I live in Portland, Oregon. [531] I am a civil engineer. I was graduated from the University of California in 1902, specializing in civil engineering and specializing in bridge work. Prior to my graduation, I might say, and immediately subsequent thereto, I was laborer on bridge work, structural iron worker, and occupied various subordinate positions. I then went into the office as draftsman and in 1906 I was in charge of the office of the Consulting Engineer of the Harriman Lines; they were at that time the Southern Pacific and Union Pacific Systems. In 1907 I went to the Los Angeles & Salt Lake Railroad as Bridge Engineer; that is the line from Salt Lake City to Los Angeles, now part of the Union Pacific System. Early in 1909 I was detailed to Washington to act as Bridge Engineer on the extension of the Union Pacific in to Puget Sound and the Western Washington territory. In 1914 I moved to Portland as Bridge Engineer of the Oregon-Washington Railroad & Navigation Company, and in 1915 I became Chief Engineer for that company, which position I still hold. And since that time, I have been permitted to engage in outside practice in the course of which I have been identified with very large structures in the

(Testimony of Samuel Murray.)

Pacific Northwest, including the very high bridge at Twin Falls, Idaho, which I believe was the highest bridge in the world. I am not in any way at all connected with the Northern Pacific Railway. I was called upon by the Northern Pacific Railway Company to examine Beaver Creek Valley and make a study of the bridge,—the railway bridge that was in place at Wibaux prior to the flood of June 7, 1929, and I made some investigation in connection with preparing to testify here in this case. I examined the Beaver Creek watershed very carefully in 1931 I believe, and examined the stream and took into consideration all the factors that would determine the adequacy or lack of adequacy of the bridge as it existed prior to June, 1929; and I have heard the testimony introduced here in behalf of the defendant in this case or substantially [532] all of it. From the study which I have made and which I have detailed here, and from the evidence which I have heard in this case, assuming that evidence to be true, I am able to form an opinion as to the adequacy or inadequacy of the railroad bridge in question over Beaver Creek at Wibaux, and I have an opinion as to the adequacy or inadequacy of that bridge prior to the flood of June 7, 1929. From all the information available as to conditions which existed prior to June, 1929, I believe the bridge was quite adequate—would have been considered quite adequate. I reach my conclusions from the drainage area,—from its shape, slopes which are quite gentle, from the character of the soil and the general appearance of the terrain, and also

(Testimony of Samuel Murray.)

from the record of high waters which had occurred prior to June, 1929. I would consider the bridge entirely adequate from the point of view, what a reasonable man would construct there.

Reference has been made here during the trial of this case to the Myer formula, Talbot formula and kindred formulae. I have an opinion as to such formulae being accurate to determine the open area necessary for a bridge such as the railroad bridge over Beaver Creek at Wibaux. Such formulae are entirely useless for an area of any great extent and, in fact, I have very little confidence in them for any use whatever. I ceased using them after I had been in practice for a very few years; they are totally, or approximately unreliable.

Cross Examination:

(By Mr. Maury).

I didn't aid in the construction of the Salt Lake & San Pedro; I entered into its maintenance, however, and made repairs too. Bridges in that area for a great part, may have been constructed according to formulae, but they washed out, in floods which I have observed, which were as extraordinary and unprecedented almost, as this one. In regard to what an "unprecedented [533] flood" is,—of course, a flood in any drainage area might be without any precedent in that area, but I would say that it would be a flood so great and so large that

(Testimony of Samuel Murray.)

no reasonable man would expect that such a thing could occur.

Q. Surely. But if there was the same or a larger flood in 1907 than it was in June, 1929, then you would say the June, 1929, flood was not unprecedented?

A. Necessarily, yes.

Q. If there was in 1921 covered, a larger section of the town in Wibaux, than in 1929, then you would say the 1929 flood was not unprecedented, would you?

A. That would also follow, yes, sir.

I spoke of my having examined the drainage area, part of it. As to being treeless, that entered into my consideration. The slopes are not steep; the slopes are generally rather gentle.

I was at the trial of the case of Heckaman vs. Northern Pacific Railway Company, at Baker, in September and October, 1931. (Witness reading). I testified as bracketed there I think.

Q. And you were asked this question: "Mr. Murray, the best test, and perhaps the only good test on the sufficiency of a bridge over a particular stream is whether it carries the water that is seen to run in that stream year by year—isn't that the best test?" I asked you that question there, and you answered: "That is the best test under ordinary conditions, yes." You were asked this question: "In fact, when a bridge after being constructed is seen not to carry away floods that recur every two or

(Testimony of Samuel Murray.)

three years, there is something wrong with the bridge, isn't there?"

A. Yes.

Q. And you answered: "If the bridge interferes seriously with the regular flow of the stream, I think the bridge is inadequate."

A. All right. * I answered that way.

Q. Do you wish to read any further?

A. No; but I would like to comment on that.

Q. Well, you can comment in the hands of counsel. I haven't quite finished. [534]

(That was on page 649 of the Heckaman trial), year 1931.

At a trial at Baker late last September and early October (witness reading) I was asked these questions and made these answers.

Q. You were asked by me: "You never had seen the bridge when it stood as a bridge by itself, but only as a part of another structure, is that so, Mr. Murray?" and your answer: "Well, I saw the bridge and examined the bridge after part of it had been raised." "Q. As a part of another structure?" "A. Yes, but of course, in forming that opinion, I was readily able to visualize the bridge as it had been." You made that answer?

Q. You were asked: "How long are the openings of the bridge that you have in mind?" You were asked that question and you answered: "There was a 70-foot center span and two 20-foot small girder approach spans," and you were asked: "And your conclusion was that a reasonable and adequate

(Testimony of Samuel Murray.)

bridge there at all times before June 7, 1929, should have had openings corresponding with what you have named?" and you answered: "Yes, there might have been some variation—slight variation, but it was in that vicinity."

A. Yes, sir.

When I was at Baker the first time, some blue prints were shown me of that bridge. I don't know where those plans are; I have not seen them since.

Redirect Examination:

Counsel called to my attention some testimony here in the Heckaman case (pages 649 and 650). I wanted to make some comment and he said I could do so. The question was: "In fact, when a bridge after being constructed is seen not to carry away floods that recur every two or three years, there is something wrong with the bridge, isn't there?" And I answered: "If the bridge interferes seriously with the regular flow of the stream, I think the bridge is inadequate." Now, the explanation I want to make [535] is this, that I have heard nothing to indicate that the bridge was seen not to carry away floods that occurred every two or three years. I have heard that the bridge failed to carry away the most extraordinary flood I had ever seen in an area of this nature and something I had not seen in my experience; and of course, it had occurred.

JOHN OIEN,

being recalled in behalf of the defendant, by Mr. McCarthy, testified:

Q. Mr. Oien, associate counsel thinks I over-looked asking for the ground elevations of the O'Keefe house and at the Yuell house; the ground floor elevations—have you them?

A. The floor of the Yuell house is 2642.7, and the floor of the O'Keefe house is 2640.3.

By Mr. Maury:

Q. Mr. Oien, I neglected to ask you the other day whether any of the land which is outside of the black line which you described was ever on a Northern Pacific Railway section; that was never a land-grant section was it?

A. I don't know. I think Wibaux is on section 12; I can't say what numbers are Northern Pacific land-grant sections.

Mr. HALL: That quarter section of land——

Mr. MAURY: This was purchased by the Northern Pacific and none of the Town of Wibaux was ever on a land-grant section?

Mr. HALL: No.

Mr. McCARTHY: I think the record will show that every adverse ruling so far as the defendant is concerned, was duly excepted to, but for safety's sake, may it be recorded in the record that the defendant is granted an exception to each and every adverse ruling in the case?

Mr. MAURY: Oh, I don't know—in Federal Court. [536]

(Testimony of John Oien.)

The COURT: I think an exception was taken in every instance.

Mr. MAURY: I think so.

Mr. McCARTHY: We formally offer in evidence the two bridge models and all parts thereof and the same as the relief map, and that they may be returned to the custody of the company.

Mr. MAURY: We don't agree that they depart from the custody of the Clerk here, unless they go to the Clerk of the Supreme Court of Montana or to the Clerk of the Circuit Court of Appeals, or to the Clerk at Baker (Montana).

The COURT: I think they should be perhaps, kept in the custody of the Court.

Mr. McCARTHY: All right, may some of our people pack them up? The security of them, that is what I am interested in. Will you read the deposition of W. L. Darling, please, Mr. Jameson? The stipulation covering it need not be read in this case, I take it?

Mr. MAURY: Oh, no.

Deposition of

WILLIAM L. DARLING:

BE IT REMEMBERED, that, pursuant to the stipulation hereunto annexed, and on the 28th day of December, 1933, at my office in the Northern Pacific Railway Company Building at 176 East

(Deposition of William L. Darling.)

Fifth Street, St. Paul, Minnesota, before me, G. T. C. Peterson, a Notary Public in and for the County of Ramsey, State of Minnesota, duly appointed and commissioned to administer oaths, etc., personally appeared W. L. Darling, a witness produced on behalf of the defendant in the above-entitled actions, now pending in said Court (Nos. 2444, 2446, 2493, 2494, 2497 and 2517, in the District Court, Fallon County, Montana), who, being first, by me, duly sworn, was then and there examined upon the following written interrogatories, submitted on behalf of counsel for said defendant, and upon the following cross-interrogatories submitted on behalf of counsel for said plaintiff, and testifying in answer [537] to said interrogatories, as follows:

Direct interrogatories propounded by counsel for defendant, to-wit:

1. State your name, occupation and place of residence.

A. William L. Darling, St. Paul, Minn.

2. Of what engineering school are you a graduate?

A. Worcester Polytechnic Institute. B. S. 1877.

3. Were you formerly in the employ of the Northern Pacific Railway and other railroads? If so, state fully when, and in what capacities, as an employee and officer.

A. Yes, started with the Nor. Pac. in March 1879, then one month cross sectioning along Sweet Briar Creek; then Resident Engineer in charge of

(Deposition of William L. Darling.)

construction from New Salem to Curlew to October 1st, 1879; then Resident Engineer from Belfield to one mile west of Sully Springs to October 10th, 1880; then revising line and cross sectioning bluffs along the Yellowstone from Cabin Creek to Miles City to April 20th; then west overland to Bozeman and helped run line over Pipestone Pass to Garrison as transitman which we reached about Aug. 1st 1881; then revised line as Chief of Party down the Hell Gate River to Clinton until Oct. 7th 1881; run preliminary line down the Missoula River to a point near Thompson Falls; then made a reconnaissance up Nine Mile Creek to the summit of divide between the Missoula and Flathead Rivers which ended Dec. 1st, 1881; then became Resident Engineer of Construction from the present town of Garrison, Montana, to Clinton where I stayed until the completion of the work in August, 1883.

Commencing Sept. 1st, 1883, I had charge of the Minneapolis Terminals, including bridge over the Mississippi River, and the construction of line St. Paul to Watab which work ended in February, 1884.

March, 1884, to December, 1885, I was Chief Engineer in charge of location and construction of St. Andrews Bay and [538] Chipley RR. 1885 to 1887 in charge of terminal construction in Minneapolis and St. Paul for the C. B. & Q. RR. 1887 Chief Engineer of the Duluth, Watertown & Pacific RR. now part of the Great Northern system. 1887

(Deposition of William L. Darling.)

to 1888 located line built by the Great Northern, Sioux Falls to Yankton, So. Dak. 1888 Engineer in charge of washout repairs, Minot to Great Falls on Great Northern Ry.

My next connection with the Northern Pacific was in the fall of 1888 when I had charge of the construction of the bridge over the Yellowstone on the Rocky Ford or Red Lodge Branch where I stayed about a month, then took charge of the location and construction of the main line from Little Falls to Staples; then in the same winter had charge of the Boulder to Elkhorn Branch; then in charge as Resident Engineer of the location and construction of the line over the Bitter Roots from the summit down the east side for 10 miles, it afterward being extended to St. Regis, Mont. About the middle of February I was appointed Prin. Asst. Engineer of the road from Spokane to Billings in charge of all engineering and construction, where I remained until transferred to St. Paul as Prin. Asst. Engineer from Billings to St. Paul, occupying this position until April 1896, when I was made Chief Engineer for the Receivers until Aug. 1, 1896, then became Division Engineer under E. H. McHenry; then in 1901 was made Chief Engineer where I remained until August 15th 1903 when I resigned to accept service elsewhere.

I was Chief Engineer of the Chicago, Rock Island & Pacific RR. from August 15, 1903 to October 1st, 1905, and Chief Engineer of the Pacific

(Deposition of William L. Darling.)

Railroad (now the Chicago, Milwaukee, St. Paul & Pacific Railroad) from October 1st, 1905 to December 18th, 1905 when I returned to the Northern Pacific as Chief Engineer where I remained until 1916 when I resigned. My service included about 31 years. Following my resignation in 1916 I entered, and still continue, consulting practice with headquarters in St. Paul. [539] During this period I have acted as Associate Member of the Naval Consulting Board during the World War; appointed a member of the Advisory Commission by the Secretary of State of the United States in 1917 and went overseas to Russia to study rehabilitation of the Russian Railway System; member of the Board of Economics and Engineering for the owners of railroad securities in New York 1921-1922; member of the City Planning Board and City Zoning Board, St. Paul. I am also a member of the American Railway Engineering Association and the American Society of Civil Engineers and have acted as President, Northwest Section, of the American Society of Civil Engineers.

4. Are you familiar with the country traversed by the Northern Pacific Railway in western North Dakota and eastern Montana?

A. Yes.

5. Do you recall the bridge carrying the main track of the Railway Company over Beaver Creek at Wibaux, Montana, that was constructed in 1896?

A. Yes.

(Deposition of William L. Darling.)

6. Describe the bridge as built in 1896?

A. The bridge consisted of a 70-foot central span and a 20-foot approach span on either end over the slopes.

7. Did you approve the plans for the bridge built in 1896?

A. Yes.

8. Was it your intention that the space between the abutments and the piers be left open as waterways, or that the spaces should be filled or partially filled?

A. Partially filled.

9. Was that a usual or unusual manner of constructing bridges over streams?

A. It was and is a type in general use.

10. Is it customary or not customary to riprap or face the slopes of earth embankments contiguous to and for some distance [540] back from the ends of bridges over streams?

A. Yes, it is customary.

11. Was the bridge over Beaver Creek raised several feet in 1898?

A. Yes, in connection with the grade revision of Beaver Hill.

12. What purpose does riprap rock serve, if any, in addition to protecting the earth works from washing away?

A. Increases waterway by decreasing slope of embankment.

13. Can you form an opinion as to whether or

(Deposition of William L. Darling.)

not the bridge, consisting of a 70-foot span over the creek and two 20 foot approach or slope spans, provided a proper and adequate opening for Beaver Creek?

A. Yes.

14. What is your opinion?

A. It was adequate.

15. Give your reasons for your answer to Question No. 14.

A. The waterway was designed from known high water. No higher water ever occurred while I was with the road, and further from the fact it did take the full flow until 1929, a period of 33 years, and then failed only during a period of precipitation that could not have been foreseen. Furthermore it covers a period from 1882 to 1929 of known high water, or 47 years.

16. In your opinion, did the bridge as constructed with the space between the abutments and the piers partially filled, as described by you, result in the restoration of the Beaver Creek stream or water course to its former state of usefulness as near as may be?

Mr. MAURY. We object as calling for an opinion not within the capabilities of a mining engineer; calling for an opinion as to law of Montana and invading the province of the Court and Jury. We add to the objection that the witness is [541] not shown at all to be familiar with its former state of usefulness.

(Deposition of William L. Darling.)

The COURT: I think he has shown himself to be qualified to state his opinion. I will overrule the objection

A. Yes.

(Signed) W. L. DARLING.

Cross Interrogatories.

1. When did you first commence to work for the railway company?

A. March 28, 1879.

2. Are you still in the employ of the railway company?

A. No.

3. Do you draw a pension from the railway company?

A. No.

4. If you answer that you did approve the plans for the bridge built in 1896, question number 7 in the direct interrogatories, then tell at great length and completely what measurements of the watershed, if any, that you consulted or used.

A. The water way for Beaver Creek was determined by me from known records of high water and personal knowledge of myself supplemented from information furnished me by the Bridge Supervisor of that district. These high water marks were obtained by observation during high water stages and were determined and made by the Supervisor of Bridges and Buildings of the district. They were taken into consideration by me. Water way for Beaver Creek was determined on the ground

(Deposition of William L. Darling.)

by myself after an extended investigation in company with the Bridge Supervisor.

5. Tell of and give copies of the records of high water marks made either by the Northern Pacific Railway Company as to the water flowing under this bridge or from the records of the Northern Pacific Railway Company, or records made by the Northern Pacific Railroad Company. [542]

A. The highest known water in Beaver Creek at Wibaux up to 1896 was the high water of 1893 with elevation of 2626.3 at the railway bridge. To my knowledge the 1893 high water was the highest water in Beaver Creek at Wibaux during my service with the NP Railway Company, 1879 to 1916.

6. State whether you intended that the bridge have a width as to its opening for water of seventy feet long or one hundred fourteen feet long.

A. The 70 ft. girder was designed to span the creek proper, the 22 ft. end girders were provided to span the embankment slopes and also provide additional opening during high stages of water.

7. State how often you have visited Wibaux in a professional capacity.

A. Approximately 20 trips.

8. Give the dates of such visits and consult any records that are available to you in the possession of the railway company or otherwise, showing such dates, and as near as you can, the length of time

(Deposition of William L. Darling.)

that you stayed professionally at Wibaux and working for the railway company.

A. Impossible to give exact dates, but between 1893 and 1900 made annually two inspections of this bridge, one in the spring and one in the fall. The time for these inspections was probably from 15 minutes to one half hour. In 1898 made several trips to Wibaux during period of grade revisions where I would spend sometimes one hour and sometimes half a day.

9. Did you have before you, when you were passing professionally upon the sufficiency of the bridge at Wibaux, that was erected in 1896, any original survey or plat of the original survey of the Northern Pacific Railway Company, or its predecessor, showing the elevation of its track as originally laid from Medora to Glendive? [543]

A. Yes, these records were always available and were at the time referred to in 1896.

10. If you answer that you did have access to such a plat or survey, was this plat and survey in manifold copies or duplicate originals for use of the engineers of the railway in 1896?

A. Original tracings were not in duplicate but blueprints were available for field use.

11. Are such duplicate originals, or any of them, in existence today and open to your inspection, or in your possession. If so, please attach a copy of the same or one duplicate original to this deposition, having the Notary Public mark it Exhibit 1.

(Deposition of William L. Darling.)

A. I do not have in my possession the NP records. NP Railway Company have records on file in St. Paul which were opened to me for my inspection.

12. When did you first see the Beaver Creek Valley as it intersects the present line of the Northern Pacific Railway Company?

A. In the early part of October, 1880.

13. Is it not a fact that according to the plats and surveys made by the Northern Pacific Railroad Company, which is the predecessor in interest of the Northern Pacific Railway Company, that the banks of the stream where the railroad now crosses Beaver Creek were more than five hundred feet in the width, that is to say, from East bank to West bank was more than five hundred feet?

A. No, it is not a fact. There is a bench on the center line of railway approximately 500 ft. west of present bridge: Elevation of foot or lowest part of this bench being two or more feet above any known high water previous to 1896. This bench, together with general topography of valley immediately adjacent considered in connection with the N. P. records, clearly indicates that the main channel has changed from time to time and in a [544] definite easterly direction. N. P. records further show present main channel to be about 60 ft. easterly of the main channel of 1880. N. P. records further show the banks of the Beaver Creek to be no greater distance apart than 80 ft. Consequently

(Deposition of William L. Darling.)

at no time could the bench of land above referred to have been the westerly bank of present Beaver Creek.

(Signed) W. L. DARLING.

Mr. McCARTHY: If the Court please, I think on cross-examination of Mr. Clements, counsel had him—yes, I see the timber abutments are still in the exhibit, but we want it raised up to the position at the time of the flood. I suggest that Mr. Clements do it after the adjournment there, and if counsel for the plaintiff wishes to, he may be present.

T. J. BUSHELL,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. Jameson).

My name is T. J. Bushell. I live at Wibaux; have lived there since April, 1907. When I went there in April, 1907, I located right in the town of Wibaux. We bought a ranch 25 miles south of Wibaux, but we didn't move out onto it. That ranch south of Wibaux is on Beaver Creek,—the Davis Ranch. I heard some testimony relative to a severe storm of 1907; that ranch of mine was in the path of that storm. I was there at the time. Relating briefly the

(Testimony of T. J. Bushell.)

nature of that storm in 1907: with my partners, we drove down from Wibaux in the forenoon and got out to the ranch between 11:00 and 12:00 o'clock. We hadn't been in there very long when a cowboy rode in and told us to get the stock off the low land,—that there was a storm. We looked over and saw the storm coming across the valley and in a few minutes, we was on [545] the roof,—five or six of us,—and we stayed there until dark that night. The next day after the storm we drove over the land we had bought; my partners hadn't seen the land. We looked it over, and the second day after the flood we drove back to Wibaux. We were driving team and wagon. At no place is the road more than half a mile away from the course of the creek down to Wibaux; it follows it a good distance. We forded it; there were no bridges in what is Wibaux County at that time. As to the extent to which the creek banks may have overflowed, what I noticed on my way back to Wibaux—will say that there was 12 or 14 miles that it had been pretty well out of the banks; five miles north of the ranch had been the worst place. There was a lot of stuff there that had washed away from the ranch proper. As I say, the creek had overflowed its banks 12 or 13 miles from my ranch; that would be 12 or 13 miles from Wibaux. From that distance in—12 or 13 miles, on up to Wibaux—you could see that it had gotten out of the banks some, but most of the distance it had not gotten out of the banks. As to the situation at Wi-

(Testimony of T. J. Bushell.)

baux, it had raised very little in the town of Wibaux. I talked to the people at the hotel——

Mr. MAURY: We object to anything that was said.

A. Well, we forded the river a mile and a half from Wibaux without any trouble. There was no evidence that the creek had been out of its banks at that point, and there wasn't any evidence that the creek had been out of its banks between that point and the town of Wibaux, and there was no evidence that the creek had been out of its banks in the town of Wibaux.

I was in Wibaux in 1921. I heard the testimony as to the 1921 flood. Describing briefly the extent of the storm and any high water in Wibaux in 1921,—the 1921 flood came mostly from the east and south-east. On the east side of the Davis Addition there was quite a lot of water; that is what has been described [546] as Possum Hollow (you are pointing to it); there was quite a lot of water over on that side clear down to the industrial track of the railroad, and some parts of that were washed out. By "industrial track" I mean where the elevators are. As to the extent of the water in the town of Wibaux, well there was a small stream ran to the west along the right-of-way and turned at the lumber yard and went down under the viaduct. There was no water at all on Main Street or Wibaux Street. As to whether there was any water at all in that part of town west of Wibaux or Main Street,

(Testimony of T. J. Bushell.)

there was only this little stream that ran down along to the viaduct—that little stream that ran down along the railroad track and to the viaduct. As to whether the water in 1921 was confined to this district in the eastern part of town, that is the Davis Addition and the vicinity of the elevators,—will say that the creek raised; part of it ran from Possum Hollow and part of it followed the east side of the Davis Addition; there was quite a raise in town, but not much raise south of town. I wasn't in Wibaux in 1929.

Cross Examination:

(By Mr. Colton).

During the 1907 flood I was at the Davis place 26 miles south of Wibaux. It is a fact that I and some of the neighbors had to go up on top of the roof to get out of that flood. The water was just over the bar of the window—that would be the middle of the sash. That was Davis' house. In regard to damage to Davis' property during that flood, the wool was washed away. Part of that wool was found at about Edgehill at the Sheep Hook ranch. That flood continued south of Wibaux as far as Baker. I don't know about any damage done to the Milwaukee Railroad buildings west of Baker, during that flood of 1907.

Q. Between Baker and Plevna, isn't it a fact that the Milwaukee Railroad buildings all through there—— [547]

Mr. JAMESON: We object as immaterial in

(Testimony of T. J. Bushell.)

this case; the town of Baker isn't in the Beaver Creek valley.

Mr. HALL: We object to this,—that Baker is 30 miles south of the divide between the head of Beaver Creek, and it is a stream that flows the other way; and it is immaterial in this case.

The COURT: I think you are too far away. I will sustain the objection.

This water that made that flood that I saw down at the Davis Ranch in 1907, the bulk of that rain fell at the Davis—or between the Davis Ranch and what is known as the Big Hill. The Big Hill is at the divide about eight or nine miles south of where I was—ten miles maybe.

Q. That storm fell on the Big Hill and as I understand it, part of it came into the Beaver Creek Valley; and where did the rest of it go?

A. The rest of it went south; went south towards Baker.—towards Marmarth. At the place where I was 25 miles south of Wibaux, the width of that storm was about half a mile. As to its depth there; there was a picket fence around the house and it was near to the top of the picket fence.

Q. Did you see any ear-marks of the 1929 flood?

A. I wasn't there. That house has been pulled down for 15 years I guess.

Q. Did you notice whether any damage was done to property in that vicinity in the 1907 flood? Just tell the Court and Jury what damages was perpetrated to buildings, fences or anything else that

(Testimony of T. J. Bushell.)

was damaged in the 1907 flood, in the south end of the Beaver Creek?

A. There was no homesteaders in there; there was eight miles south of there; there was six miles north of there, and one two and a half west, was all the buildings I know of in that country; and there were very few fences there,—some was washed out—fences.

During the 1921 flood I mean to say there wasn't any water [548] west of Wibaux Street. As to whether it is a fact that in the location of the swale it was all covered here, will say that I took my car out of the garage at 4:00 o'clock; the garage was down on the right-of-way; I took it west of Wibaux Street and I put it in Hazlewood's garage—(that is the place that you are pointing to). The Dan Sutherland barn isn't on that plat.

Q. Where would that be located, if it were on here? (pointing). That would be about 75 feet west of E Sstreet and south of First Avenue South? Isn't it a fact there were three or four foot of water in that barn during the flood of 1921?

A. I never heard of it until now.

Q. So you say there wasn't any water at all over in this end of the town in 1921?

A. On the flats. I never heard there was any water west of Wibaux Street. There was no water that came along the swale and along the south line of the railway embankment and went to the viaduct—going east going to the viaduct; the water

(Testimony of T. J. Bushell.)

that went through the viaduct came from the east. There was no water when I took my car out.

I was employed by the Northern Pacific Railway Company some years ago. I was in the real estate department; worked for them about five years.

Redirect Examination:

My occupation now is real estate dealer and insurance. I am not employed by the Northern Pacific Railway at this time. I have been Mayor of the Town of Wibaux, and on the council; and I was on the Dawson County high school board when we were in Dawson County.

(Mrs.) ELLEN GRAHAM,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. Hall).

My name is Ellen Graham. I live in Missoula, Montana. [549] I have lived at what is now known as the town of Wibaux; I came to that locality in 1884. I guess it is the Main Street where I located when I came there. It was not known as the town of Wibaux then; it was Mingusville. As to pointing out, I don't know whether I could do anything with that (on that relief map) or not. My building was south of the Pierre Wibaux property; my place of business was the Graham Hotel. When I came

(Testimony of (Mrs.) Ellen Graham.)

there, Mr. Wibaux occupied his residence in the building immediately north of me. Mr. Wibaux erected a retaining wall, or stone wall in the rear of his lot; he built that while he lived there. My attention having been called to this little white line on the relief map at the east end of the Wibaux property, I recall that that was the location of where that wall was, down to the creek. I don't recall whether the channel of the stream ran closer to the wall than it does now; I don't know. I lived there to 1906.

Q. How close was your building to the west bank of Beaver Creek? How close did the east end of your hotel come to the west bank of the creek?

A. They come to the lots. The bank of the stream was not quite a full lot to the rear end of the building; it wasn't quite to the end of the block; the block wasn't all there.

Q. State whether or not during the time you lived there—from 1884 to 1906—whether water ever got up into your building in any way?

A. Yes, sir. I don't recall that water ever got high enough to overflow this stone wall that Pierre Wibaux put in there, and I don't recall that I ever saw water high enough to be on Wibaux Street in front of my place.

OSWALD JOBE,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. Hall).

My name is Oswald Jobe. I now live at Rugby, North [550] Dakota. I have lived in Wibaux; was living in Wibaux on June 7, 1929. I was working at Hazlewood's garage. That is the long building with the round roof west of the Milton Hotel, facing on Orgain Avenue.

On the morning of June 7, I recall having seen some high water there. It was between 6:00 and 6:30 that I opened up my garage. I got up on that morning, to open up my garage, between 6:00 and 6:30. I was rooming at that hotel right next—that is the Milton Hotel right next to the garage. When I came out of the hotel that morning to open my garage, as to what I noticed in the way of water, and where,—will say I got up and went out and I walked down towards my garage, where I was working, and I was going to open up, and I noticed some water running down on the other side of the highway that runs north and south, and there was some water running around there.

Q. Coming in where?

A. Right here (indicating).

Q. Coming in there?

A. Yes.

Q. What were you going to do then?

(Testimony of Oswald Jobe.)

A. I was going to open my door; I didn't pay much attention. But I couldn't get it open, and I couldn't get it open because the rain expanded it, and I let it go until the other man,—Then I went back up the street towards the pool hall; that is the pool hall on the corner there just east of the Milton Hotel. I looked down towards the depot and I see some water running there and I was going to watch it.

Q. Where did that water run?

A. Right there (pointing).

Q. Between the lumber yard and the depot?

A. Yes. And I walked over towards the depot. There was no water at that time on Wibaux Street or Orgain Avenue. As I walked over Wibaux Street towards the depot and lumber yard, I looked south down Wibaux Street. I saw big waves of water going down towards the river. I know what is called the Mattie Miller house, or green house; I know where she lived,—in the big green house. It was in the vicinity of [551] that that I could see the water.

Q. What did you do when you walked over towards the lumber yard?

A. I went back up towards the pool hall and I went into the pool hall and I was going back towards the closet, and there was some fellows in there and they started to talk, (that is the building you are pointing to); I was standing listening to them fellows talk; at that time, I didn't know who they were; at that time, there was a roaring noise

(Testimony of Oswald Jobe.)

going in the basement. Some of the fellows says: "There must be some water coming in here," and I looked out of the window about that time and there was water running down Wibaux Street——

Q. Was it running north or——

A. It was going south.

Q. North?

A. Oh, north.

Q. Which way was it going?

A. Going towards the railroad track. Then we stayed around a while; then finally, the water came up to the floor; we stood around a little longer, and the water kept coming up a little higher and a little higher, and one of the men decided we better get out of there, and he couldn't get the door open and he kicked it out and when we went out, we was above our knees in water. That water was on the Main Street when we come out,—where the Pickering building is on the corner. That water was on Main Street; it was going north. Then I started back with the rest of the men, down from the corner; we went down here and we stepped into an alley; we turned from the Pickering building and went west on Orgain Avenue,—there was kind of a shed there, and we stepped in there. We stayed there a few minutes, then the water started getting higher, then we started out of that; we went out the front onto Orgain Avenue, then we started for the Milton Hotel. At the time I got to the Milton Hotel, the water was on me up to my breast. That water,

(Testimony of Oswald Jobe.)

as I was walking towards the Milton Hotel, was coming around the garage towards us.

Q. Coming around your garage or around the Milton Hotel? [552]

A. It was coming swiftly around here and around here (pointing). It was coming around west of the Hazlewood garage and down Orgain Avenue, and also coming into the garage from the Milton Hotel, from the south, and then turning down towards the north.

I went into the Milton Hotel. The furniture was floating around, then I went upstairs and things were crushing around and people says: "We will have to see about getting out of here." I couldn't get down; there was too much water. We stepped up that step-ladder up the stair where the roof was. When I went up there, I could see the water flowing; I could see the water flowing pretty swiftly. I could see from there the direction it was flowing on Wibaux Street; it was flowing north. I should judge its speed was about as fast as I could walk.

Q. As it got down towards the viaduct where did it go? As it went on north there, where did it go to, could you tell?

A. Well, it went north. I saw the viaduct. I couldn't say exactly how long I stayed up on the Milton Hotel before I could get down; it was several hours that I had been upstairs there on that roof.

(Testimony of Oswald Jobe.)

Cross Examination:

(By Mr. Maury).

When the water had gone away, I didn't notice a deep hole there (where you are pointing) below the viaduct; it was going so fast with water I couldn't say.

Q. I mean after it had gone.

A. After it had gone, yes there was a hole there.

Q. Do you remember when it was pumped out by the town of Wibaux and you saw it was about 20 or 30 feet deep right at the north end of the viaduct?

A. I couldn't say.

Q. What was the deepest you ever saw it?

A. I don't recall that I ever seen a hole there before the flood; I never had seen it before. After that flood I saw it—there was there in the center. I couldn't say how wide that hole was across the street. I could [553] not say approximately, after the flood, I was glad the water went down; I was glad I was safe; I couldn't say whether that hole was as wide as across the street. I couldn't say how long that hole was there, going lengthwise of the street; I wouldn't say, because—I didn't see any men working in it afterwards, filling it up; I didn't see them repairing a sewer in that hole.

ARTHUR KIMBALL,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

My name is Arthur Kimball. I live in Missoula; am employed by the Northern Pacific; I have worked for the Northern Pacific Railway Company 22 years. I was working for the company in June, 1929; was roadmaster at that time. My present position is roadmaster.

In 1929, with particular reference to June 7th, I was at Wibaux. It was around 6:00 or 6:30 on the day of the 7th that I got down to Wibaux,—close to that time. I stayed in the town of Wibaux or vicinity during that morning; I stayed there from that time until about 2:00 o'clock. I was on the railroad embankment all that time. I saw something in the way of an unusual phenomena, so far as water is concerned, there that morning or that day. Along about—I don't know as I can give you the time—it was between 9:00 or 9:30, I looked off to the north and there was a wall of water coming at least five or six feet high—I looked south, off this way (pointing).

Q. Could you give us what direction it was coming from Mr. Kimball.

A. It was coming down Wibaux Street and to the main channel and to the west and coming towards the railroad once probably. When I seen it

(Testimony of Arthur Kimball.)

first, it was back by the lumber yard or possibly back up by Orgain Street, they call it. As to where that wall of water [554] went: it came down and went through the viaduct and bridge.

Cross Examination:

(By Mr. Colton).

Q. Mr. Kimball, just describe to the Court and Jury what you observed at Wibaux from the time you got there on the work train at 6:00 or 6:30 until the time you saw this wall of water. * Describe the motions of the water and all about it. Give us an idea.

A. Well, when I first arrived at Wibaux, there was probably two or three feet of water going through the viaduct. The majority of that water was coming back by the lumber yard, back by the depot. There possibly was some of it coming from somewhere else; there was a small stream from up by the Catholic Church. I don't know how long that water continued to come that way—from about 8:30, somewhere in there; and "she" apparently dropped—the water did, and at that time was when we got this wall of water. But up until 8:30 there was a steady raise of water.

Q. And you didn't see any wall of water until 9:00 or 9:30?

A. I didn't pay any attention to the time. But at the time this wall of water came, there was not three or four feet of water on Main Street—there had been some water on Main Street, possibly two

(Testimony of Arthur Kimball.)

feet. The viaduct was not full. At that time, as to what was the condition of the railroad bridge—up until 8:30—the water at the railroad bridge, will say it was pretty close to the top of the girders,—or bottom of the girder, I mean. When this wall of water came, I was west of the viaduct, standing right over there (where you are pointing), right close to the end of the viaduct. I could see down Wibaux Street and off towards the county bridge, off in there.

Q. But you couldn't see as far as the bridge for the buildings, could you?

A. Yes, I could see there in that direction.

Q. Isn't it a fact you had to watch over in here (pointing)?

A. No, I didn't; I didn't have to. I could see right by the [555] lumber yard; you could see up Wibaux Street.

Q. The only thing you could see was the width of Wibaux Street?

A. You could see to the west—I mean to the east.

Q. As you looked down Wibaux Street and down to the Mattie Miller place, how much can you see? You can see a space equal to the width only of Wibaux Street clear to the south, isn't that correct?

A. You can see the width, yes.

Q. How much can you see, looking from the viaduct east?

A. Oh, you can see clear to the highway, way up above there.

(Testimony of Arthur Kimball.)

Q. You can see there, but you can't see south of the highway?

A. The highway south of the county bridge?

Q. Yes.

A. You couldn't see it then, because it was covered with water. I don't know whether it is a fact that the railroad bank has been raised five feet; I haven't been there since. It is possibly a fact that standing west of the viaduct, you can't see anything but right back by the lumber yard; possibly that is a fact.

Q. You saw this water come right down here between the county road and the railroad embankment?

A. I certainly did; I seen it between the county road and the railroad embankment.

Q. That is where you saw this six feet of water coming, between the county road and the railroad embankment?

A. Yes.

Q. You couldn't see it—these buildings—you couldn't see it south of the county road?

A. I could see it.

The COURT: Have it your own way, if you want to. The witness has testified what he saw.

As to where I saw this wall of water, I told you I was standing on the west of the viaduct and when I looked off towards the county bridge was where I seen the wall of water, and up Wibaux Street. I didn't see the wall of water at the same

(Testimony of Arthur Kimball.)

time at both places; I would have to look one direction and then the other. The wall of water was coming from the south. I wouldn't say it [556] was going straight north up Main Street.

Q. It was coming this way?

A. No, not that way; it was coming practically from south; south is off about this direction, compass south, but railroad-south would be straight up Wibaux Street.

How I happened to stop my train at Wibaux was because I was afraid to cross the viaduct.

Q. Didn't you have orders at 1:25 the night before at Glendive, to proceed to Wibaux?

A. I had orders at Glendive to proceed to Hodges; I had no notice of high water at Wibaux until I got to Hodges at 4:00 o'clock in the morning or sometime along there.

Q. In the former case of Heckaman vs. the Northern Pacific, I will ask you to read this and see if it is correct. Read it to yourself. (Transcript on Appeal, M. C. Heckaman vs. Northern Pacific Ry. Co., Vol. I, page 548). If that is correct, you read that aloud to the jury, starting in here (indicating).

A. Well, it is correct.

Q. Read it to the jury.

"I was roadmaster on June 7th 1929. On the night of June 6th I was in Billings until 7:10; I left Billings at 7:10 that night on No. 2. I arrived at Glendive about 1:35. When I got to Glendive I

(Testimony of Arthur Kimball.)

was instructed to go out with a work train, then being made up, to go east and repair some wash-outs at Hodges and then proceed to 'Beaver' where there was some high water. Hodges is about 12 miles west of Wibaux; we got to Hodges before we got to Wibaux."

That statement is wrong; I never said that before.

Q. You say you never said that?

A. I might have said "Beaver", but I got word of the high water at Wibaux when I got to Hodges.

Q. Did you make this statement, or did you not,—in the case of Heckaman vs. the Northern Pacific Railway Company?

A. Maybe I did, but I never remember it.

Mr. McCARTHY: There is no question about the record.

A. Well, I said it. [557]

Redirect Examination:

Q. Mr. Kimball, if you referred to "Beaver" in your testimony at the previous trial, did you have any information as to high water in Beaver Creek before you got to Hodges?

A. Not before I got to Hodges, I never received any information about any high water at Beaver Creek.

Q. You did, when you got to Hodges, you were told there was high water at Beaver Creek?

A. Yes, I was called into the telegraph office at Hodges by the Chief Dispatcher and he told me to

(Testimony of Arthur Kimball.)

look out for high water at Wibaux; it was about 4:00 o'clock.

Recross Examination:

Q. Is there any Beaver Creek at Hodges? When you said you were proceeding to the "Beaver" at Hodges, where would you naturally proceed? Beaver Creek, wouldn't you?

A. Yes. The word I received at Hodges was just what I told you—to "look out for high water at Wibaux." That was around 4:00 o'clock. The Chief Dispatcher sent that word from Glendive.

CHARLES M. WOODARD,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. Hall)

My name is Charles M. Woodard. At the present time I live in St. Cloud, Minnesota. I was living 1909 to 1923, on my farm one mile north and four miles west of Wibaux. In addition to my farming, in the fall of 1909 I was manager of what we called the "North Side Elevator" in Wibaux; that has been torn down since. As to where that elevator was located with reference to the Northern Pacific main-line track, it was north of the track near the stockyards—near the stockyards, but north of the track. I had been managing that elevator—I was

(Testimony of Charles M. Woodard.)

there until the 1st of December, 1909,—all that summer. I was transferred to the [558] new elevator that they just had built on the spur there. During the time I was managing that elevator north of the track, I was living down town on Main Street. The county bridge wasn't constructed at that time. Going to and from my place of work I usually went down on the railroad track, that is I crossed over the railroad bridge here at Beaver Creek. In going back and forth I observed a concrete dam across Beaver Creek, immediately north of the bridge over Beaver Creek. My attention being called to the broken white line on either side here, and the depth on the relief map, that would indicate about where that dam went across. I said I observed that dam frequently as I went back and forth. I would say the dam, proper, across the creek would be 90 to 100 feet wide. In regard to the channel of the stream as it passed under the bridge, that channel of the stream as compared with the bridge at that time, was about the same width I think. Describing that dam: it was a concrete dam directly across the stream, four or five feet high, with wings at either end going back to the embankment of the railroad. I would say that the width of the channel of the stream, proper, was not as wide as the extreme end of those wings. While I was there working at the elevator, and after I had moved to the elevator, south, when there would be heavy rains in that locality and on

(Testimony of Charles M. Woodard.)

the east side of the town, I have noticed what effect the water had on the elevator track; it would run down from what they call Possum Hollow; it would run down against the elevator. I had charge of that elevator after I went to the south side, until the 1st of March, 1910. Then, from that time on, until 1918, I was farming.

In 1918, I worked for the State of Montana—the State Hail Department. My duties were adjusting the loss that occurred from hail; that was the State Hail Insurance. I started in in 1918, with Wibaux County; later on, I had Fallon County, Dawson County and Prairie County. In adjusting losses for hail, at the time, I [559] had occasion to travel all over this territory during the hail season. Whether during that period I ever observed any storms in Beaver Creek valley prior to 1929, will say I never saw any cloudbursts; I did see some severe storms, hail storms, or what they call very heavy rains; sometimes they wouldn't be over three or four or five miles in extent.

I was not in town in June 1921, when there was some high water there; I was there the next afternoon. I didn't notice any damage there to buildings from high water at that time. I didn't hear of any.

I was at home in Wibaux on the morning of June 7, 1929; in pointing out where by building was at that time, I am “turned around” here. Here was my house here (pointing). My house was the

(Testimony of Charles M. Woodard.)

second house north of the community church and on the west side of Wibaux Street,—south of First Avenue North and also facing on Wibaux Street. Also, I had a place of business on the south side of the track at that time,—in these buildings here—these blocks here—in that large block; that is the second block south of Orgain Avenue and on the east side of Wibaux Street; I had my place of business in there. I woke up on the morning of June 7th, shortly after 6:00 o'clock. As to what I did when I first got up, will say—my youngest son had bought some young chickens and they were out in the front yard in the coop. During the night, my wife worried about them. Shortly after 6:00 o'clock I got up to see if they were all right; I went out in the front yard. After I had found out how the chickens were, I just looked up Wibaux Street and saw water coming down Wibaux Street—I look south; I looked through the underpass or viaduct. I could look through on the street through the embankment. The water was up south of my place of business,—as I just pointed it out. The water was flowing north. It hadn't gotten down clear to Orgain Avenue at that time. I then got my family up; they were in bed [560] at that time—still in bed—the family, my wife and son and daughter. In getting them ready to get out, as to time, they were up and dressed I think in about 20 minutes. When I told them to get up and dress,—I didn't know what they was doing

(Testimony of Charles M. Woodard.)

—but by the time they got dressed, the water was down in front of our place and up on our porch, and we decided we would have to leave the house. As to what we did in getting out of the house and how we got out,—my married son and his wife was rooming with us and he—when his wife got dressed—she was dressed—he carried her to the high land west towards the high school and came back and carried my wife to higher ground, and he made the third trip and helped me to higher ground. They went west to get to higher ground. By the time I got out, as to how deep the water was to the south side of my building—or by the time he helped me out,—it was four feet high or better. Then I went down to the railroad; my wife stopped at the school house I think—that is the high school building up here (pointing)—and I came to the—I was there at the underpass or viaduct. When I got down there, I didn't attempt to go down to my place of business because there was too much water. When I got down to the viaduct, from the position I had there by the viaduct I could look south on Wibaux Street. When I got down there, there was lots of water coming down Wibaux Street. At that time, I think it was four feet deep in the streets. It was coming from the south; it was running north, coming from the south, passing under the viaduct. There was other water approaching that viaduct from other directions; there was water coming from the east between the lumber

(Testimony of Charles M. Woodard.)

yard and the railroad, and there was water coming down from the west along the railroad embankment. Along the right-of-way there immediately north of Orgain Avenue, the ground is considerably lower there than it is on Orgain Avenue—it is lower. As to the effect that it had immediately south of this viaduct, when the [561] three streams of water came together—one going north on Wibaux and one west from the river and the one east along the railroad track—will say that there was kind of a “churning” to go under,—sort of a whirlpool effect.

I stayed on the embankment for some time; I was there most all of the day. I had an object by which I could fix the height of the water as it kept rising on the south side; it was the north wall of the Orgain Building; the Orgain Building is across the street from the lumber yard. The wall had been painted black and then in white letters, the word “Groceries” had been painted. When I stood there, as to how it compared with the word “Groceries”, it got to the lower edge of the word “Groceries”. The height of the lower edge of this word “Groceries” I think was about six feet. At that time, when the water got up about six feet, there were automobiles parked around on Wibaux Street around the corner; there was two on either corner, and we could see about six inches of the top of the car. My attention having been called to defendant’s exhibits D-26 and D-27, will

(Testimony of Charles M. Woodard.)

state that I recognize those as scenes that I saw while standing on the embankment and looking south down towards the Orgain Building; that looks like it. The both of them are pictures that I recognize as conditions that existed there at different times during that flood.

Mr. HALL: We will offer these two exhibits D-26 and D-27.

Mr. COLTON: No objection.

The COURT: They may be received.

In each of these pictures they show the word "Groceries" that I have just testified to, on the north side of the Orgain Building, and also shows some of the automobiles that were standing out there.

While I was standing there, I had occasion to watch the water north of the track as it flowed down by my home; there was [562] something on that side of the track by which I could gauge the depth of the water above the ground as compared with the depth of the water along the south side of Orgain Avenue; there was tree limbs projecting out over the walk so that I passed under that tree as I went down the street. (Witness standing up), I as six feet tall. That tree was on the east side of the street and a little south of the south side of the community church; it would be along pretty

(Testimony of Charles M. Woodard.)

close with the junction of Nolan and Wibaux Streets—I think it was right in here (pointing), right in here about the east end of Nolan. I said there were some limbs there that projected out over the sidewalk and in passing under those limbs, I would have to stoop or take my hat off. The water got up in those branches. If it was touching those limbs of the trees, as to how high up it was at the word “Groceries”, will say it was up to the highest point. I would say it was six feet deep when it was touching those limbs. The depth I would say it was over here and coming to the lower edge of “Groceries”, that was six feet above the sidewalk I think,—likely seven feet above the ground. The water got about two and a half feet in my residence down there. The floor was about 28 inches from the ground under my house.

Going back to 1909. I heard that testimony here of one or two witnesses, that for a long time,—for a great many years—after the bridges were built and the permanent bridge as built there in 1898, that they used to drive under the bridge and by the piers. While I was there operating those elevators, I never saw anybody driving through there at any time. While I had the elevator north of the track, I will show you how people in bringing in grain from south of town, drove to get to my place. Here is Wibaux Street and here is the county bridge. I am speaking of people coming from south of town,—at that time, they

(Testimony of Charles M. Woodard.)

came up over; there was no viaduct in 1909. So they had to haul their grain up over the grade, then they went down along the right-of- [563] way and forded the creek—forded the creek north of the bridge and came up to my elevator. When the elevator was torn down and we moved to the south side of the track, we had to haul material down there; we had about 2,000 bushel. To haul that to the elevator on the south side we had a team and wagon-tank and went west, Wibaux Street and then up over the embankment and came down to First Avenue South; and during that time, I say, there was absolutely no way to drive under that bridge there.

In my store there in the south of town, the water got about five feet deep I think it was.

Q. Did you sustain damage in both houses?

Mr. COLTON: Objected to as incompetent, irrelevant and immaterial.

The COURT: Yes; we better confine ourselves to this case.

Q. Did you ever bring any suit against the railway company, or make any claim against the railway company for any damage?

Mr. COLTON: Objected to as incompetent, irrelevant and immaterial and has absolutely nothing to do with this case.

The COURT: Yes; I think it is immaterial whether he did or didn't.

Q. While you were standing on the embank-

(Testimony of Charles M. Woodard.)

ment the morning of June 7, 1929, state what, if any indications you saw of water backing up towards the south?

A. I didn't see any water backing up towards Wibaux Street. This water flowing north on Wibaux Street all the time, what I would say as to the speed at which it was flowing,—I don't know about the speed of water Mr. Hall, but I know that I couldn't walk as fast as that water was running. It was not smooth, placid water as it was running down towards Orgain Street; it was in waves; like rapidly moving water.

Cross Examination:

(By Mr. Colton).

I got on the embankment shortly after 7:00 o'clock and [564] I was standing on the embankment during that morning, on the west side of the viaduct; I was looking towards the south and the north most of the time—I had interests both ways.

Q. Did you see a wall of water five or six foot coming down there at any time during that day?

A. I didn't see any wall of water.

Q. You heard Kimball testify that he saw a wall of water coming down Main Street five or six feet high. Is that statement correct as far as you know?

A. As I say, I didn't see any. That was around 6:30 when I got up and looked down Main Street from the viaduct. As to whether the viaduct was open at that time and as to whether there was

(Testimony of Charles M. Woodard.)

much water going through the viaduct at that time, will say that there wasn't any coming through when I first saw the water on Wibaux Street. As I looked towards the south from the viaduct down Main Street, I saw the water on Main Street coming down.

Q. And there wasn't any water here at that time (pointing); it was just coming down here (pointing)?

A. Yes, sir.

In regard to driving between the piers and the abutments, of course I didn't come to Wibaux until 1909; I was there and bought my land in the fall of 1908. I don't know whether there was a dam north of the bridge at that time—I have no way of knowing; but in 1909 there was. If there was a dam there, it would be utterly impossible for anyone to drive through there.

Q. In regard to this tree and compared to the water; you say this "Groceries" here was exactly the same height as this right here (pointing)?

A. No, I didn't say it was the same height,—nearly so. It was nearly a foot lower. I was there on the embankment when it kept coming in the pieces, kept breaking away.

Q. Naturally, the water would raise on the north side?

A. It didn't go out and make any great big wide opening at one time. I said the water was about two and a half feet in my house there. Of

(Testimony of Charles M. Woodard.)

course, I don't know when it reached that particular [565] point, whether it was before the embankment broke or after.

Redirect Examination:

In the 1929 flood, as you understand, at Wibaux Street there was quite a depression as you went down under the viaduct.

Q. And this low ground on either side of the track where water was coming in, was several feet lower than any of the land to the south or north——

Mr. COLTON: Objected to as repetition.

Q. A person standing at your house and looking under there and looking at the level of that?

Mr. COLTON: We object. The witness testified there was no water going under the viaduct.

The COURT: What time are you referring to?

Mr. HALL: He said at 6:00 o'clock he looked up, and counsel asked him if he saw any water going under the viaduct and he said he didn't know. I am asking him now, if he was standing and looking that way to the south, whether he would be able to see water coming in.

The COURT: Answer the question. Overrule the objection.

A. No, I didn't see any.

Recross Examination:

I don't know whether my house is about the same level as the Congregational Church; there

(Testimony of Mrs. Hayes.)

wouldn't be much difference; it might be a little lower.

MRS. HAYES,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

I live in Wibaux; have lived there about 12 years; was living there in June, 1929, in the Davis Addition. I got up about 5:00 o'clock on the morning of June 7th. We did our chores at [566] that time and we saw the neighbors out and we went up Beaver Creek a ways; we went up to the "red" walk—the cinder walk. I didn't go as far as the county bridge. I observed Beaver Creek at that time. At that time the water was very high and some people came out and told us we better go back; that the telephone poles were falling over; that we might be struck by a live wire.

Q. Do you know where the telephone pole was that was blown over?

A. I think it was the telephone line going down towards town. We didn't stay down on the cinder walk; we went south of Mr. Sletten's house over towards the creek bank. From that place, we looked out across the creek and the water was coming very high; well, it looked like the water coming over a dam, to me; that is as near as I could de-

(Testimony of Mrs. Hayes.)

scribe it. This water, like it was coming over a dam, I saw that just about opposite the bend in the creek there just back of Mr. Meek's house—Randy Meek's house—the creek makes kind of a bend there; it was right in here (pointing out on the relief map).

Mr. McCARTHY: Witness indicating a line running approximately east and west across from the——

It was right in here (pointing); I was standing about here and I could see the water——

Mr. McCARTHY: Witness indicating the westerly end of Alice Avenue.

Q. Now, the water extended across from there to where?

A. It was up to just about the top of the dam at that time and these banks.

Q. How far did it extend, if it did extend? How wide was it?

A. It was clear across the creek this way.

Q. Can you give us an idea on the map how far across it was?

A. I imagine it came clear across here, like this.

Mr. MAURY: Did you see it or just imagine it?

A. No, I didn't imagine it; I saw it.

Q. Try and indicate the best you can, Mrs. Hayes, how far west [567] that water extended.

A. Well, I couldn't tell exactly I don't believe.

Q. You have moved the pointer up and down there and kept it in motion.

(Testimony of Mrs. Hayes.)

A. As I understand it, the creek is coming around here, isn't it? That is right. I couldn't tell how far it extended across this way, but it was almost up to the top of the bank here. As to what else I observed there in the way of water,—well it came on down the creek and I didn't stay so very long there, and it came on down the creek and I noticed Mr. Ostby's chicken house go, and we had to go back home. Out in the water there that day, I saw some trees and some horses, and we had some hay racks by the green barn and they went down the creek.

Q. What direction did they take?

A. They went south,—or north, I meant to say; they went towards the railroad embankment. At this time we hadn't had any breakfast. We went home and had breakfast then. I mean by "we"—Mrs. Sletten, Edith Jones, and Mrs. John Lynch and her children.

I was living in Wibaux in 1921. I don't know what street it was, but it was not so very far from the schoolhouse,—near Dr. Keller's residence; it was the old Cowee house where Mr. Carroll lives now; that wasn't in the Davis Addition, but in the main part of town. That is what has been referred to as the high school; that is the building to the west, and north of the main line. I can't remember as to what I observed in reference to high water in 1921. I know the water came up to our sidewalk; I know the sidewalk was attached to the house

(Testimony of Mrs. Hayes.)

and I can't tell you anything more about the water in that year.

Cross Examination:

(By Mr. Maury).

Q. Do you remember somebody coming up on a horse to get the keys so the people could get into the schoolhouse to get dry? Do you remember anyone coming from over on the west side of town across [568] the railroad bridge to get the keys from the janitor of the high school there so that the people could get in, and that that man borrowed Edith Jones' horse to ride across the water to the janitor's office to get the keys?

A. They possibly did,—not that I know about that—not that I saw; I didn't hear the conversation or anything.

CARL ROWE,

being first duly sworn as a witness in behalf of the defendant, testified:

Direct Examination:

(By Mr. McCarthy).

I live at Fort Morgan, Colorado. My business is farming. In June, 1929, I was living in Wibaux, Montana. At that time I was in the garage business. I was in Wibaux on June 6th. I had occasion to go out in the country in the afternoon of that date. I went about 23 or 24 miles southwest of Wibaux. I made some repairs out there at that

(Testimony of Carl Rowe.)

time and then returned to Wibaux. We encountered a storm on our return trip. As to the conditions as we encountered them 20 or 25 miles south of Wibaux on the afternoon or early evening of June 6th,—well, we got the work done sometime in the evening—I don't know what time it was—it was getting late and we started for town in an easterly direction,—I don't remember just what road it was on now—but it got raining so hard we had to stop. I did the work out there at the farm for Charlie Casey; he was farming for somebody else. Describing the storm and what effect it had on me and the car I was in,—we drove as far as we could; well, it got so we couldn't see to drive any further. We must have stopped there 20 or 30 minutes, maybe longer than that. It was not just a light rainfall; it was more like coming out of a washtub; then it kind of stopped, that is slacked up so we could see to go ahead a ways, and the road was practically level; and we couldn't see no road, the whole [569] thing was covered with water I would say from maybe three to five inches deep,—just like a lake we was driving through. I got back into town that night.

On the morning of June 7th I got up between 5:00 and 6:00 o'clock I think. I can point out better where my house was.

Mr. McCARTHY: Witness pointing to a house a trifle to the east of Drake Street projected, and south of Grant Avenue.

(Testimony of Carl Rowe.)

Q. When you got up there the morning of June 7th Mr. Rowe, will you tell us briefly what you saw there in the way of water—high water—and the action of the water?

A. I didn't notice anything unusual until breakfast was ready and I was sitting at the west side of the house by the window, where I could see to the west; I had full view of the west, and I noticed Massey had some horses in the pasture over there and they were going around, uneasy,—and I went on with my breakfast and I looked back again and I seen the water coming over, and there was waves, I suppose three to five foot high, that is the way it looked to me,—the height they was. Those waves came right on over north towards the town of Wibaux. I saw buildings or property moved there that day by that flood; the Methodist parsonage, I seen that float off into the creek and lodged against the railroad embankment. I know where the so-called Miller or green house is located. I saw buildings disturbed in the vicinity of that house; I seen a shed south of the green house wash away. After I see these buildings wash away,—I don't remember what time that was—I wanted to get to town and I went east from where I live up and around down by the elevators to the railroad bridge, and I think the water was just about at the highest point at that time when I got there at the railroad bridge. The water to the south of the railroad bridge at that time was

(Testimony of Carl Rowe.)

moving—it sure was,—moving north. I didn't any time there that day see any water backing up or moving to the south—I sure didn't. [570]

Cross Examination:

(By Mr. Maury).

Q. How did the people move in the Davis Addition from north to south; as the water rose, they moved down here towards Esther Avenue and this place up here indicated Olive Avenue?

A. They came up Beaver Street as they moved out. They moved from north to south.

DEFENDANT RESTS

REBUTTAL

DWIGHT DENNIS,

being first duly sworn as a witness in behalf of the plaintiff in rebuttal, testified:

Direct Examination.

(By Mr. Maury).

I now live 30 miles south of Wibaux, in Ash Coulee. That is a branch or tributary of Beaver Creek. I have lived at that place about eight years. Before that, I lived on the Beaver Creek about three miles straight east of there; that was about 27 miles south of Wibaux; I lived there from 1902 to 1921. That is where I was first, when I came to Montana in 1902.

(Testimony of Dwight Dennis.)

I have observed every year the conduct and actions of Beaver Creek to the south of Wibaux and round about where I have lived. As to the actions of the creek in 1904—in the spring of 1904, in the break-up, we had high water, over the flat right up to our house. I speak of break-up; that is snow in the winter 1903-1904.

I saw the actions of the river the evening of June 6th and morning of June 7th, 1929. The water from that spring break-up in 1904 was as high at the buildings as it was on June 6 or 7, 1929. It remained from that snow, melting or breaking up, about eight or ten hours, I suppose. Later in 1904, about the middle [571] of May, we had about a week or ten days of steady rain; the creek was out of the bank up around the buildings. That rise in the creek later in 1904 as compared with the rise of June 6 and 7, 1929, it wasn't as high—it wasn't quite as high at the ranch buildings as it was in 1929. The next unusual occurrence of the creek was in 1907, about the 21st of June. That was from a cloudburst. Describing the dimensions of that cloudburst, or storm, as I call it, well the heavy rain was right up on the head of the Beaver, right on the divide between the Big Beaver and the Pennell Creek, and it flooded the flats, washed corals and hay stacks, and drowned cattle and sheep. Water was up 16 inches in my house—the only time it has ever been in the house since I have been in the country. Comparing that with the flood of June 6 and 7, 1929, well according to the marks there at the

(Testimony of Dwight Dennis.)

old buildings, it was about 21½ foot higher in 1907 than it was in 1929, and right at that particular point, the stream was 400 or 500 feet wider anyway, something near that. All the fences on the creek was washed away. Our corrals was washed away; all our machinery was washed away, and down at the Davis Ranch a mile and a half north, it washed some of the old sheds away; it washed a lot of their wool away and all of their machinery and pasture fences. Mr. Bushell has said there was no person living within six miles when he was there on a ranch in 1907; I was living a mile and a half south and about half a mile east of that ranch at that time.

Describing further rises of water after 1907 that have taken place in the Beaver Creek Valley and so far as they are to the south of Wibaux, well in 1909 we had high water; it was all over the flat. I was running sheep there at that time and it run us off the creek with the sheep; and in 1916 we had high water again. As to how the 1916 high water compared with the 1929 high water, it wasn't as high. And then in 1925 we had awful high water. In 1925 the high water taken all the bridges on East Creek; [572] that is the branch just east of where I live. Abrams lives right on that creek it had taken four or five bridges out right around his place. I don't know as I can give the size of those bridges exact, but there was bridges I should judge was possibly 20 or 25 feet, maybe some of them 30

(Testimony of Dwight Dennis.)

feet wide. There was four right on that creek taken out. I had occasion from a position which I occupied at that time, to observe the condition of the bridges after that flood. I was supervisor, looking after the county road bridges; and then up on the main Beaver there was two big bridges—steel bridges—went out there at Ollie in 1925. Those bridges were I should judge, 40 to 50 feet wide; they were across the Beaver. I speak of them as steel bridges,—pile—steel frame; they was on piling drove in the ground. The creek wasn't out of the banks in 1921; we had no high water up there. Someone up near Abrams spoke of losing some sheep, there were sheep lost in 1904 up near Abrams'; I was working for Davis looking after his sheep at the time and we had some sheep drowned just about where Mr. Abrams is. As to the height of that water right where the sheep were drowned, well I suppose the creek was a quarter of a mile wide anyway, at that time in there.

Cross Examination:

(By Mr. Jameson).

I said I live about 30 miles from Wibaux. During all that time I lived in that territory. My testimony with reference to high waters prior to 1929 is confined to the area around my place. In 1904 the spring high water was from the break-up of the snow melting. We had a hard winter that winter and it stayed on until the 1st of April, and it

(Testimony of Dwight Dennis.)

all went out in a short time and the creeks was all out of the bank. Then in the middle of May, it was just from a general rain—rained steady for a week or ten days and raised the creek out of the bank. This rain of May, 1904, was not a local cloudburst in my particular locality; [573] it was from a general rain in 1904. I was a witness in the case of M. C. Heckaman vs. Northern Pacific Railway Company, tried in the District Court of Fallon County.

Q. Calling your attention to your testimony on cross examination, page 993 of the transcript, will you just read to yourself, this portion of your testimony; just read that all, if you like.

A. Well, that is 1907. That should be 1907 was when we had the cloudburst—That says 1904.

Mr. MAURY: Perhaps, you got 1907 mixed up with 1904.

Q. Have you read this portion that I have indicated? Particularly from here down to here? Have you read it?

A. Yes.

Q. Now, in the trial to which I have called your attention Mr. Dennis, did you not testify as follows: "In this 1904 high water I couldn't say how far north that extended on down the creek. I know at the ranch where I lived on the main Beaver, it wasn't as high as farther east. The heavy rain was on the East Fork Creek. That was a local cloudburst in that particular locality."

(Testimony of Dwight Dennis.)

A. Well, in 1907 is where——

Q. Well, you testified as I have read, in the trial at Baker, in regard to 1904?

A. Well, I don't remember saying that there was a cloudburst in 1904; if I said 1904 I meant 1907, is when we had the local cloudburst. The cloudburst of 1907 was a local cloudburst, I said.

As to how far that extended down Beaver Creek, well the heavy rain was from Rattlesnake; that was about 24 miles from Wibaux, and it extended to the head of Beaver. The head of Beaver is about 30 or 35 miles from Wibaux.

Q. This cloudburst of 1907 extended the distance of from 24 miles to 35 miles?

A. The heavy rain was from Rattlesnake, about 24 miles south, to the head of Beaver.

Q. But from a point 24 miles from Wibaux there was no cloudburst?

A. There was no heavy rain that I know of. I don't know whether [574] that water ever got to Wibaux in 1907; all I know is hearsay from there on. In 1907, as to the distance down the creek that I went myself, I was 12 or 13 miles down, gathering up the wool, machinery and stuff that was washed away,—12 or 13 miles from my place.

Q. So that would be 18 or 20 miles from Wibaux.

The 1929 flood covered a much larger territory than the 1907 flood. 1909 was not a cloudburst; it was just from local rains; it was steady rains that

(Testimony of Dwight Dennis.)

raised the creek in 1909. My testimony in regard to 1909 high water is confined to that area around my place, and so far as I know, that did not extend into Wibaux; I don't know what it was in Wibaux, but it was purely local rain in my locality.

With reference to the 1925 high water, I said that washed out some bridges on the East Fork of Beaver Creek. The East Fork of Beaver Creek that is on the creek Mr. Abrams lives on; it heads from down towards Carlyle. As to how far from Wibaux; that would be about 28 or 29 miles south where it empties into the Beaver.

Q. The East Fork of Beaver empties into main Beaver 28 or 29 miles—that didn't affect anything on the main creek between where it entered—East Fork—and the town of Wibaux?

A. It has not.

Q. And you don't know whether that reached the town of Wibaux? You weren't in Wibaux?

A. I wasn't in Wibaux.

Q. So far as you know, it did not do any damage between the point where it enters the Beaver and the town of Wibaux?

A. It washed out some culverts and small bridges in my district, but not below the county line; but not between that point and the town of Wibaux,—not as I know of.

Q. All of these heavy rains, cloudburst, and high water you testified to here were of a local nature, were they not?

(Testimony of Dwight Dennis.)

A. Well, yes. As far as I know, there was no effect at Wibaux from any of these cloudbursts or high water concerning which I testified this [575] morning; I don't know what it was at Wibaux, for I wasn't there; I am just speaking of the country where I live.

Redirect Examination:

I speak of the storm of 1907 being local. As to what the extent was of that storm, well it extended,—high water as far south as Marmarth.

Q. Where is Marmarth?

A. That is about 30 or 35 miles south and east—

Mr. HALL: We object as getting clear outside—

Mr. MAURY: They provoked that by asking if it wasn't local.

The COURT: Yes. By "local" is whether it extended farther north. Confine it to the watershed of Beaver Creek source. Let us not get "all over the country" there.

Marmarth is about 30 or 35 miles south and east of my place, in North Dakota.

Recross Examination:

With reference to the Beaver Creek Valley, as to how far north that storm of 1907 extended, north from my place, well the heaviest rains was about two or three miles north, that is, north, as the heavy rain; then it went on south; two or three miles north from my place and then south.

Q. But not north from that point?

A. Well, I don't know what it was from there on.

CHARLES O. NELSON,

being first duly sworn as a witness in behalf of the plaintiff in rebuttal, testified:

Direct Examination:

(By Mr. Colton).

My name is Charles O. Nelson. I live 25 miles south of Wibaux. During the year 1907 I lived in Wibaux County—not where I live now; I live west of there. I saw a lot of water there in 1907. There was a lot of rain there and the creek was [576] high there right below this place where I live at this time. The creek was anywhere from a half to a mile wide there—somewheres in there.

I was south of Wibaux June 6 and 7, 1929. I observed the high water there at that time.

Q. Are you in a position to make comparison between the 1907 flood and the 1929 flood at your place?

Mr. HALL: We object to that. There is nothing to show that he was down there in 1907 and 1909 (1929), so there is nothing to make comparison. You can't make comparison at Wibaux and 25 miles south.

The COURT: I understood he was comparing water in his locality in 1929 and 1907—at his locality—is that it?

Mr. COLTON: That is it.

The COURT: Go ahead.

Q. I am asking you to compare at your locality, —if there was any difference in the high water of

(Testimony of Charles O. Nelson.)

1907 and high water of 1929,—which was the greater?

A. The 1907 was the highest water of the two. As to how much,—probably a foot and a half or a little greater—more or less.

I think in 1909 there was high water there running over the flats; and several other times,—1921, 1925. The 1925 flood went over the banks there too.

I think it was around about 10:00 o'clock as near as I can remember, on the morning of June 7, 1929, that the water was highest at my place. I live 25 miles from Wibaux.

Cross Examination:

(By Mr. Jameson).

My testimony has been confined to the area around my place some 25 miles from Wibaux; that is where I live. As to how far I saw the creek in 1907—evidence of high water following the storm of 1907—well, at the head of the creek; from the head of [577] the creek. That is over 30 miles from Wibaux. Going down the creek, as to how far I saw any evidence of high water in 1907, well I seen it quite a ways on down; I wouldn't just exactly say how far it was. I went down into Wibaux sometime after; I didn't see any evidence of high water going into Wibaux—I don't think I did that I remember. Immediately after the high water in 1907, I was down the creek, down around the "Hook", and on down. The "Hook" is about 20

(Testimony of Charles O. Nelson.)

miles from Wibaux. My testimony with reference to this high water of 1907, and storm, is confined to a distance 20 miles from Wibaux to a distance of 35 miles from Wibaux, on Beaver Creek. As to the distance from 20 miles out of Wibaux on into Wibaux, whether I know what the condition was—well, I know there was some water. Edgehill is about 20 miles from Wibaux; that is the “Hook” I called it; they also called that the Sheep Hook Ranch; also called it Edgehill—we did later.

With reference to high water of 1909, that was purely a local storm as I remember it. It went over the banks in Beaver Creek, at the point in the Valley where I was at—at the place I live at the present time. In regard to how far from that I saw evidence of high water, I don’t think I went down the creek at that time; I just crossed it there at that time, so my testimony with reference to this high water of 1909 is confined to the area around my residence some 25 miles from Wibaux. I don’t know as there was any high water on down towards Wibaux; it was just a local cloudburst in my area, is the way I understand it.

The high water in 1929 was far more extensive than the high water of 1909 and of 1907; it covered much greater territory on Beaver Creek.

Redirect Examination:

Q. Did you say that the 1929 flood covered a greater territory than 1907 south from your place?

(Testimony of Charles O. Nelson.)

Mr. JAMESON: Objected to as immaterial what the condition [578] was south of his place, which was 25 miles south of Wibaux.

The COURT: Well, he says it was more extensive—the flood of 1929. You may interrogate him as to the extent in that watershed, Beaver Creek.

* * *

Mr. COLTON: That is all.

TOM SLETTEN,

being first duly sworn as a witness in behalf of the plaintiff in rebuttal, testified:

Direct Examination:

(By Mr. Maury).

On June 6 and 7, 1929, I was living at Wibaux, Montana. The house where I lived is right there (pointing on relief map). I got up about 5:30 I think, on the morning of June 7th. When I got up, Beaver Creek at that time was up over its banks—quite high—it kept raising. I think I was up about an hour and a half before the county bridge went out. I did not see any wall of water that morning or that day at all; I don't think there was any such phenomena there, because I was watching the creek all forenoon. People in the Davis Addition around my place, moved south. As to what caused them to move, the water kept backing up from the railroad. There might have been a

(Testimony of Tom Sletten.)

very little water in my yard that morning, but not much, because I was three or four blocks from there when the water was the highest. I did not see Edith Jones that day at all. I knew her and had known her for a long time.

Cross Examination:

(By Mr. McCarthy).

Q. Mr. Sletten, did you hear any rumbling of water there that day?

A. Well, the creek would naturally make a little noise you know; it was quite heavy; it made quite a little noise that day. I didn't keep any chickens; I didn't have any.

Q. You lived fairly close to the places where the chicken coops [579] were carried away?

A. No, I don't think; the chicken coop that I saw was from the other side of the creek, and there might have been one on our side, come to think about it now, that went down.

Q. Now, Mr. Sletten, when you speak of the people going south, you mean that they went south-east into the hills?

A. Straight south. Straight south is high ground.

Q. By "straight south" you mean the general hill on which is located several houses, in one of which Mr. Massey took refuge?

A. Well, that is west too as well as south, Massey's is. As I understand, Mr. Massey left his place and went east across the road. This place

(Testimony of Tom Sletten.)

across the road east of Massey's is called the Drake place. I know the name of this place east of the Drake place, but I can't think of it.

Q. You mean when the people left the Davis Addition, they sought the higher ground to the south of the Davis Addition somewhere in the general locality of the Drake house and the house to the east of the Drake house?

A. They didn't go that far south.

Q. They went in that direction, I take it, so that if the water kept getting higher, they could get over on that hill?

A. The Drake place or the Massey place is west of where they went down.

Q. I call your attention to a group of houses to the east of the Davis Addition and a short distance east of Regina Street. Can you tell us the owners of any of the houses in this group that are located north of Lincoln Avenue and south of Alice Avenue, projected, and east of Regina Street?

A. I believe it is Palmer, and this is Dr. Bonner's place up on the hillside here. Immediately to the east of the Davis Addition, there is a hillside there. I have given the Palmer house as one of the houses in this group; and east of the Palmer house there is a hill, and to the south there is also a hill, —further this way. [580]

WESLEY WHITE,

being first duly sworn as a witness in behalf of the plaintiff in rebuttal, testified:

Direct Examination

(By Mr. Maury).

I am a son of Mr. Charles E. White who has testified here, who owned a newspaper and printing shop in Wibaux. I am a married man, and I was living with my wife and child in the Davis Addition on the days of June 6 and 7, 1929. The Davis Addition is right here (pointing). This is Bushman Street to the west of me and Olive Street to the south; I lived right on the corner. I got up probably a quarter after 6:00 on the morning of June 7, 1929. We were sleeping with the bedroom window open and what caused me to awaken I could hear somebody talking outside excitedly. It didn't take me very long to dress—probably 5 minutes. Immediately upon dressing, I went out and asked these young fellows what the excitement was and they told me. Then I went down on Beaver Street as far as Ostby's corner here (where you are pointing). The creek was very high at that time—unusually high—and it was just beginning to trickle over into the street in front of the postoffice and telephone office at that time, across the creek from where I was then; my father's printing shop was where I could see it. That morning, my father and mother were living right here (pointing).

(Testimony of Wesley White.)

Mr. MAURY: Indicating a house in the middle of the block to the west of Main Street and to the north of—what street there?

A. On Nolan Avenue. As to what I did then with reference to visiting my father's and mother's place,—well, just as quick as I left Ostby's, I went back home and talked with my wife a minute or two and we seen that the printing office was in danger, and I wondered about my father and mother, so I went up over the hill. I went right in here (indicating), between the stockyards and the oil station—one of those buildings; then I came up onto the [581] Northern Pacific tracks and came down the track across the bridge. I found, with reference to the safety of my father and mother when I got over there,—well, I could see from the railroad embankment that they had got up on higher ground. As I crossed this railroad bridge at that time, describing the condition of the waters to the south of the bridge, will say that the opening in the railroad bridge itself was full and then on either side of the east and west side of the opening, the water was very much higher there, probably four or five feet. The water couldn't get through you know and it was backing up around—backing up to the east and backing to the west. As to the direction that the waters were taking that were backing to the east or going to the east, will say they were backing and coming around—just making a circle and coming past around the elevators into the Davis Addition.

(Testimony of Wesley White.)

The direction that the waters were taking that were going to the west, they were backing towards the depot, making a swing around; I mean after they backed around to the west, they swung around in a circle and back into the town, that way (pointing).

I stayed on the west side probably 45 minutes that morning.

Q. What caused you, if anything, to come back over into the Davis Addition?

A. Well, I talked to my father and mother and a man by the name of Mr. Faltermeyer, and many of the people were wet, and Mr. Faltermeyer wanted to be some place where they could dry their clothes you know, and he asked me about the janitor of the school; he lives over in our part of town in the Davis Addition; he asked me if I saw him that morning and I told him "No, I had not." He asked me if I would go and get the keys and bring them back to him.

Mr. McCARTHY: I don't believe this conversation is——

The COURT: No.

Mr. MAURY: The objection is very late.

About getting the keys to the school house, I came back the same [582] way I come.

Q. Where did the janitor live? Did he live in the Davis Addition?

A. He lived just west of Beaver Street. When this request was made to get the keys to the school house, I came back the same way I come and I met——

(Testimony of Wesley White.)

Q. Where was the school house, first?

A. This is it (indicating). When I got back over there, the water had backed up into my house and I seen I couldn't get over to the janitor's place without wading, and as I was coming over, I could see this Edith Jones; she was just coming down the hill on her horse; she was coming on the horse from south; with reference to Ira Parks' place, she was coming from that direction. When she got there I asked her if I could borrow her horse to go and get these keys from the janitor. She said I could, so I got on the horse and went over there and got the keys from the janitor. As to the time of day that was, as near as I can figure it now, that I borrowed the horse from Edith Jones, it was possibly between 8:00, and probably 8:30. I then returned over the bridge with the keys; I went back the same way I come—over past the stockyards and back onto the railroad tracks. On the second trip back into the west side of town, the embankment was sloughing a little, slightly at that time, because I hurried back with the keys.

Cross Examination

(By Mr. McCarthy).

I was associated there with my father. I was not the Associated Press correspondent. My brother is the Associated Press correspondent; his name is William. He is not here. I won't say whether it was my brother or not who sent out the dispatches for the Associated Press to the Billings Gazette cover-

(Testimony of Wesley White.)

ing that storm, because there was some Associated Press correspondents there at Wibaux soon after; he might have done that, I don't know. I didn't send out the story that was printed in the Billings [583] Gazette in the evening edition of June 11, 1929.

MRS. PATRICK COYNE,

a witness in behalf of the plaintiff in rebuttal, testified:

Direct Examination

(By Mr. Maury).

On June 6 and 7, 1929, my husband and I were living a mile west of town—no, a mile south of town; we lived just exactly west of Massey, across the Beaver River. I got up that morning between 6:00 and 6:30. I was up first, and I noticed a lot of water. That water was right along the creek, and I looked towards the elevators and saw some water there and I went back in the room and told Pat about it; I woke up Mr. Coyne, and we had breakfast and I was around home maybe an hour and a half before we went to town. During that hour and a half, with reference to observing the stream and the water,—well we just noticed there was a lot of water around there. My attention was directed to the water most of the time.

Q. What if anything, did you see with reference to any wall of water,—anything that resembled any such phenomena?

(Testimony of Mrs. Patrick Coyne.)

A. No, I didn't see that; I just saw a lot of water going gradually towards Wibaux, but I didn't see any walls of water,—not then.

Cross Examination

(By Mr. McCarthy).

Q. The water you saw, Mrs. Coyne, was just flowing towards Wibaux?

A. Well, it was just going,—as far as I could see. I have looked at this relief map. I recognize what has been referred to here as the Massey Ranch. I live west of Massey's place—I would call it west; I think it is directly west of Massey's place about a quarter of a mile; we live on the high ground west of Massey's.

Redirect Examination

Our place is not on this map,—no house that corresponds with our's. [584]

EUGENE PARKER,

being first duly sworn as a witness in behalf of the plaintiff in rebuttal, testified:

Direct Examination

(By Mr. Maury).

On the morning of June 7, 1929, I was living at home with my dad. My home, by going around the road, is a mile from Joe Burke's place; by going across the fields, it would be a little better than half a mile.

(Testimony of Eugene Parker.)

Q. What did you observe early in the morning of June 7, 1929, or someone at your place, observe about Joe Burke being caught away from his house by water coming down a slough there?* Could you see where it was that there was water at Burke's place?

A. No, you couldn't see Joe Burke's buildings from the place. I went to Burke's place from my place that morning; I took a Ford coupe and drove down. The direction I took to get to Burke's place was half a mile east and half a mile north. I got to Burke's house by just driving up the road. When I got there with the Ford coupe, Burke was over on the hay stack north of his house and the boy was right west from the hay stack over on the fence post along the road,—the boy, his nephew. I drove right up to Burke's house with the Ford car, within two or three feet of it. There was no water in Burke's house then.

I have a smaller brother; he was there following me on horseback. When he got there with the horse, I took the horse and got Earl Sawyer and took him to the house and then got Joe Burke and took him over. The water in the slough was up to the stirrups; I got my feet wet. Right in the slough it was running fairly swift. The water wasn't very troublous to the horse, outside of some trees and dead sheep that come through. Then after I got Burke and Sawyer to the house, the road was too wet for me to get the Ford out of there; there was

(Testimony of Eugene Parker.)

a swale and there looked to be quite a little water coming through there. I didn't take the Ford [585] through there; I took the horse; all of us got away on the horse. As to how much time elapsed between the time I brought that Ford over the flat and the time I went out on the horse,—well it couldn't have been very long; I wouldn't say just for sure, because we was hurrying around there all the time, you know; we got away just as soon as we could and I wouldn't say just how long it was. I got the Ford after that; I don't think we got it until the next day or two. Nothing serious happened to the Ford.

Cross Examination

(By Mr. McCarthy).

When I got on this horse, Joe Burke was marooned over on a hay stack. I went over and got him; I got the boy first. I wouldn't say how old the boy was, but somewheres about 13 years old. He was hanging onto a post with his arm around it. Whether the water was carrying his feet out from under him so his feet were downstream, will say I didn't notice where his feet was. I got over there on the horse and got him off that post and out of there as fast as possible.

Q. And then you went over and got Burke and got him out?

Mr. MAURY: We object—nonsense.

Mr. McCARTHY: Nonsense—when men's lives are at stake?

Testimony of

M. P. OSTBY,

who had been first duly sworn as a witness in behalf of the plaintiffs in rebuttal, at the trial of Case No. 2444, Wibaux Realty Company, a corporation, (and other cases) vs. Northern Pacific Railway Company, a corporation, in the District Court of the Sixteenth Judicial District of the State of Montana, in and for the County of Fallon, at Baker, Montana, on the 16th day of January, 1934, was read at this time by the court reporter, as follows:

“Direct Examination

(By Mr. Colton). [586]

My name is M. P. Ostby. I am County Extension Agent, Wibaux County; I live in Wibaux; on June 6 and 7, 1929, I lived in Wibaux. At that time I lived over in what they call the Davis Addition. That is this house right here with the fence around it. On the morning of the flood at Wibaux, morning of June 7th, I was over around that part of town. I got up about 5:00 o'clock that morning. I noticed a man by the name of J. E. Trollope around there that morning. I can't say that I noticed a lady around there by the name of Mrs. Edighoffer. During that morning I noticed a yellow house go out right over near the water tank. As to who that house belonged to, some people by name of Breitenfeldts lived there I think. I can't remember exactly the time that that house went out, but it went out sometime before the parsonage went out. High water took it out. It wasn't a wall of water; the water got

(Testimony of M. P. Ostby.)

too high—the raise of the water—gradual raise, perhaps. During that morning I observed Beaver Creek towards Massey's and towards the county bridge and all around there. I didn't notice any unusual conditions about the water that morning—any wall of water; I didn't see any wall of water that morning at any time.

Cross Examination

(By Mr. McCarthy).

I said the yellow house was occupied by people by the name of Breitenfeldt; I don't know who formerly owned the house. I didn't know a family named Mauser. I have lived in Wibaux since January, 1928. I don't know the people then that lived there and built the house—the occupants of early-days. I wouldn't want to say that a family named Mauser didn't live in there at some time. I don't know whether Mrs. Breitenfeldt's maiden name was Mauser; I couldn't say. Locating my house on the relief map, I believe it is this house immediately southwest of the intersection of Esther Avenue and Beaver Street. Around the house is a [587] white line outside of the house and the yard, that is a wall of scoria rock, and this small building to the rear and north of the house is the garage; and the back of the garage is the chicken house. The chicken house was washed away there during the flood. In defendant's exhibit Y-33 I recognize the left-hand corner as the scoria wall referred to by me; and part of the city water tank is shown; and then the

(Testimony of M. P. Ostby.)

building to the right of the city water tank, it is that green house; that is the green house that was occupied at one time at least, I think by Mrs. Mattie Miller; at any rate, it is a green house. Then continuing further to the right, that building over which you are now holding the glass is the church, and that building to the right of the church is an old barn I guess. That correctly portrays the situation, I suppose, at one time, as it existed in the vicinity of my house on June 7, 1929.

Mr. McCARTHY: Defendant's Y-33 is offered in evidence.

Mr. COLTON: No objection.

Q. Will you explain to the court and jury what all these marks are there in the water? Look at it closely through the glass.

A. You mean the waves there?

Q. Yes; that is what I would call them also. That is close enough. That is all.

Redirect Examination

Q. Mr. Ostby, that rough surface of the water, those are just ripples or—what caused that? What caused those ripples on that picture?

A. I think the cause was that at one time during the morning there—the forenoon—it was very windy, and waves were caused from that wind; that is my idea of it.

(Testimony of M. P. Ostby.)

Recross Examination

I couldn't say whether that object just to the right and about the middle of the picture, is a part of the road grader sticking out of the water or not. [588]

Q. There was a road grader turned over near your place was there not?

A. That must have been some object floating by, but I don't know what it was."

TOM SLETTEN,

recalled as a witness in behalf of the plaintiff in rebuttal, testified:

Direct Examination

(By Mr. Maury).

I am acquainted with John Presthus, the section foreman who was there for many years. The last time I saw him was about a week ago, in Wibaux. He was walking around; seemed to be in good health, as far as I know.

Testimony of

H. W. PALEN,

who had been first duly sworn as a witness in behalf of the defendant, at the trial of the case of M. C. Heckaman vs. Northern Pacific Railway Company, a corporation, in the District Court of the Sixteenth Judicial District of the State of Montana, in and

(Testimony of H. W. Palen.)

for the County of Fallon, at Baker, Montana, (September and October, 1931) was read at this time in rebuttal, by Mr. Maury, of counsel for the plaintiff, as follows:

“Direct Examination

(By Mr. Hall).

My name is H. W. Palen; live in Dickinson, North Dakota, and am working for the Northern Pacific as a locomotive engineer. I was an engineer on June 6th and 7th, 1929.

I was called out on duty on the night of June 6th; was the engineer on the engine hauling this work-train just testified about by the other witnesses. We left Glendive a little after 3:00, around about 3:00 it was; we done a little switching after we was called,—done a little switching in Glendive, making up our train, the head-end of it. I couldn't tell exactly the time [589] we left there—between 2:30 and 3:00 o'clock. We went to Iona and switched out three cars ahead of the engine and proceeded to a small washout one mile west of Hodges, and repaired this wash out and proceeded in to Hodges. We stopped there; the roadmaster got a little information to look for high water at Wibaux. We went on in to Wibaux and we stopped, and as near as I can recollect, there was two cars on the viaduct when we stopped at Wibaux; they were ahead of the engine, and I sat there and waited in the engine until I got instructions from the conductor to back up

(Testimony of H. W. Palen.)

off the bridge. I backed up probably 250 or 300 feet, I stayed in the engine. I remained in the engine partly. I was down in front with this head car, but I was practically around my engine, practically all the time. From the position down at the front car at the east end of my train, I was not exactly in a position to see the movement of the water; that was not very handy.

I left the train standing in the position I stopped it after I made the movement back. My train stood in that same place until I started back for water. When we got the water and come back, we stopped it practically,—well, a little bit farther west than where it stopped the first place. I went down then and looked, then, I went along the cars and once, down to the edge of the viaduct. When I got back the second time, the water was higher than the first time. I saw water coming down Wibaux Street at that time. As to its depth, when I saw it,—when we got back to Wibaux, the second time,—when we got back to Wibaux, there was considerable water down Main Street and it had covered the top of a car, when we was there yet,—covered the top of an automobile. That was a car with a top; I don't remember what kind of a car it was. That water on Wibaux was coming from the south, coming down Main Street, and also coming along the embankment from the east and from the west. It was washing around in back [590] towards the Catholic Church, in that little ravine in there. I didn't observe the water

(Testimony of H. W. Palen.)

over to the east there in the main creek. I could see the water over there, from the viaduct, but that was all. I had to stay around close to the engine; I didn't go over there.

I saw things floating down Main Street and under the viaduct. There was oil barrels; there was a wagon; lumber; milk cans—they were moving pretty rapidly at that time, and then it seemed they didn't move quite so fast. There was a slashing of the water there at the south edge of the viaduct, but not so much; under the viaduct. There was a horse swam down with the stream just west of Heaton's Lumber Company, the old building there. He came up to the bank and went back out against the current and swam out in there next to the Catholic Church and went up on the bank and went west.

Cross Examination

(By Mr. Maury).

I don't know whether the horse is still going; I didn't follow it."

Testimony of

H. W. EIDEN,

who had been first duly sworn as a witness in behalf of the defendant, at the trial of the case of M. C. Heckaman vs. Northern Pacific Railway Company, a corporation, in the District Court of the Sixteenth Judicial District of the State of Montana, in and for the County of Fallon, at Baker, Mon-

(Testimony of H. W. Eiden.)

tana, (September and October, 1931) was read at this time in rebuttal, by Mr. Maury, of counsel for the plaintiff, as follows:

“Direct Examination

(By Mr. Hall).

My name is H. W. Eiden. I live in Dickinson, North Dakota. I am working for the Northern Pacific and am a freight conductor. In June, 1929, was working on the second sub-division,—[591] the Yellowstone Division. I wasn't on duty the night of June 6th 1929; I was in Glendive. I did go on duty that night—early in the morning—about 1:35 or 1:40. We had a work-train, the work-train Kimball just testified about. From Glendive, with that train, we first went about 15 miles and made a switch on our train, then we proceeded to a small washout west of Hodges. We made the switch on our train—in order to fix a washout you have to have the stuff to fix it with and keep the engine from going in the washout, and you see, we put this material ahead of the engine so to fix the washout, and then go on with the train. Our instructions were to fix it at Hodges and then we were instructed to go from there—our destination was Beach, so we couldn't get to Beach without first fixing it at Hodges. For that reason, we had to have our gravel in front of the engine. We dumped the gravel and material necessary there and got the washout fixed at Hodges. Then we proceeded to Wibaux.

(Testimony of H. W. Eiden.)

We got to Wibaux about 6:30, —35, somewhere about that time. When we got there, we didn't go on through to Beach as directed. We stopped at Wibaux on account of the dispatcher displaying a signal to stop. After we left Glendive, I believe the roadmaster got word from the chief dispatcher, at Hodges, or received instructions from him, at Hodges, to look out for high water at Wibaux. When we stopped at Wibaux, we went into the office, that is, I did, to ascertain the cause of stopping the train there. As to what orders I got there: we were just held, for instructions. When we stopped our train at Wibaux, we stopped it at or near the viaduct; that was the head end. After I found out that we were held there, I didn't make any movement of the train right away—not for a little while—we stayed there a few minutes and we see we couldn't go, so we backed up off the viaduct west three or four hundred feet possibly; maybe 100 or 150. At that point, the train remained there possibly two hours. As to what we did [592] then: there was nothing to be done there with what we had in the front of the engine, so we had some rock on the train we took back to Beaver Hill, and in the meantime, got water at Heckaman, and came back with the rock ahead of the engine. We made a switch; we couldn't switch at Wibaux. When we came back with the rock, as to what we did with the rock, it was too late to do anything; we stayed there—backed off the viaduct and stayed there. We had

(Testimony of H. W. Eiden.)

put the rock ahead of the gravel, because gravel wouldn't have been any use and rock might have, and if we needed it, we could have. When we got back there, we found conditions—while we were gone, the water had raised and made conditions unsafe to do anything, so no rock was put in at all. During the time I was at Wibaux, I suppose I was in the caboose some of the time, but most of the time but most of the time I was out in the vicinity of the viaduct and depot—in the vicinity of the depot anyway.

Describing to the Jury what I saw in connection with this water, as I said before, we arrived at Wibaux 6:30 or—35, about that time, with this work-train and we were stopped—we had orders to proceed to Beach originally—we were stopped at Wibaux by high water; we stopped about 6:30 or—35, and the water at that time was coming just down inside the viaduct, and a few minutes later, it started coming down Wibaux Street. It raised steady until the time we decided to go back to Beaver Hill and get the rock down and do any good if we could, and when we got back in an hour or so, we decided it was too late and we didn't do anything,—so we didn't do anything. What I observed in the rise of the water, how much it rose, and things of that kind, well, at a period after it started on Main Street—well, steadily, as long as I was there, and possibly, down through the viaduct, it was going faster than any place else, or through the bridge,

(Testimony of H. W. Eiden.)

about the same. As I was there, it raised steadily, and as it got higher, different objects that were loose started floating down [593] the creek. I had gone back to Hodges with the train before the parsonage and the highway bridge gave way.

Cross Examination

(By Mr. Maury).

As to the height of the water before I left, on Main Street, we left twice there. The first time, it was possibly; it had just raised, going up, under the viaduct, a couple feet possibly. The height of the water on Main Street,—that is where I am speaking about—on Main Street—a couple feet possibly. And then I left, and I came back. Then, as to the height of the water,—I couldn't see how high it was when we came back; it was considerably higher.

Redirect Examination

Q. Did you see any automobiles or anything standing on Main Street or Orgain Avenue when you came back the second time?

A. Well, we could see them when we came back, but shortly afterwards, they were covered with water; and the color of the water was such that we couldn't see."

R. A. LYMAN,

called as a witness in behalf of the plaintiff in rebuttal, testified:

Direct Examination

(By Mr. Maury).

In regard to the accuracy of results obtained by Kutter's formula in such a cross section as the cross section which has been called "M" during the testimony of Mr. Lillis, will state that in my opinion, the accuracy would be much greater in a section such as that at Massey's or at Burke's. Explaining why: Kutter's formula is a formula that has been derived—to find the average velocity of the flow through a channel,—channel being more such where the banks are so that the water is in a compact body, more probably for such a channel as an [594] irrigation canal, and the farther it gets away from such a compact, uniform channel, the less reliable and less accurate it becomes.

From the testimony that I have heard at this trial about the bridge, its measurements as given by Mr. Clements, the records that have been introduced by the defendant, and my actual survey of the ground around the bridge, you asking as to what I have to say about whether the stream was restored to its original state of usefulness as near as may be, by the bridge that stood over Beaver Creek at Wi-baux—the railroad bridge, from 1896 to 1929,—the original condition of usefulness could not have been restored because the great deal of evidence shows the fairly frequent backing up of water by the in-

(Testimony of R. A. Lyman.)

sufficient bridge opening. In my opinion, that channel undoubtedly, was narrowed by the bridge; I would say it was narrowed from about 170 feet to 65.

I heard the question of one gentleman on the jury to one of the witnesses for the defendant. As to whether there is any reason why that stream, Beaver Creek, on June 7, 1929, from Massey's to First Avenue South, should have been deeper in the valley where the valley was wide, than where the valley was narrow, will state that that reason was the results of back-water from the railroad embankment.

Having heard all of the testimony as to the bridge at this trial, having examined the history of the bridge from 1896 to June 7, 1929, as shown in the exhibits of the railway company,—knowing the size and condition of the watershed, and my own examination of water marks, as to what my opinion is as to the adequacy of the bridge to permit the free flow of such waters as would reasonably have been expected to come to the bridge, will state that in my opinion, the bridge was very inadequate from the day or the time that they filled between the abutments and the piers and, in my opinion, that condition was very evident after [595] the 1921 flood, that those conditions should have been—were self-evident to anyone examining them.

Q. And by inadequacy, have you reference merely to whether the bridge would stand or not, or with reference to the persons living and having their property on the benches immediately south of the fill?

(Testimony of R. A. Lyman.)

Mr. HALL: The defendant objects to further testimony along this line on the ground that it is improper rebuttal. They allege in their original complaint that the defendants were negligent in constructing an inadequate and insufficient bridge, and now this is simply coming in in rebuttal as part of their case in chief.

The COURT: I think it is a repetition; Mr. Lyman has already testified——

Mr. MAURY: The answer of the defendant speaks of a bridge with 110 feet of opening. Now, the testimony attempts to show the bridge was correct with different openings—openings that were not 110 feet; and this is addressed to that testimony.

Mr. HALL: They put in their testimony on that very question; they examined this witness at length.

The COURT: Proceed.

(Question repeated):

A. I have reference to both.

Q. Mr. Lyman, having heard all of the testimony of the defendant's witnesses here as to the bridge, what is your opinion as to whether any water would have gotten into the building shown to have been occupied by Nick Wagner on June 6 and 7, 1929, if there had been a bridge with openings 115 feet at Beaver Creek by the Northern Pacific Railway?

Mr. HALL: We object to that question as asking this witness to determine a question that was submitted to the Jury, and [596] improper examination on a question of issue that should be submitted to the Jury.

(Testimony of R. A. Lyman.)

The COURT: Oh, yes, you experts have testified to the adequacy of the opening. Overrule the objection. Let him answer the question, if he can.

(Question repeated):

A. I believe there would have been very little, if any.

Q. By "very little" how much?

A. I am very doubtful whether there would have been any. I wouldn't say whether it would have hit the floor of that building, perhaps. As to whether, in my opinion, it could have gotten above the floor, will say that no one could tell that right down to a fine point. My opinion is, I don't believe it would have gotten to his floor.

Cross Examination

(By Mr. McCarthy).

Q. Mr. Lyman, when you were on the stand the other day here, I asked you on cross examination, about your ascertaining as a maximum—your testimony with reference to having ascertained 16,000 cubic feet of water per second as the maximum amount of water on the day of the flood, and I called your attention to the narrative of your testimony given in one or more cases tried. I now call your attention, having since secured it, to the question-and-answer transcript, the verbatim transcript of your testimony on direct examination, in the case of Bailey, and others, vs. the Northern Pacific Railway Company, tried at Baker, Montana, starting on

(Testimony of R. A. Lyman.)

the 25th of September, 1933, and I direct your attention to the testimony given by you on page 382. Now, Mr. Lyman, when your attention was called to this matter the other day, it was your position, as I understand it, that the matter which I had called to your attention was given on an assumed statement of facts in answer to a hypothetical question, is that correct?

A. I thought the general line of testimony was in regard to that, [597] yes, sir.

Q. And it was your position that at the previous trials, your testimony was based on an assumed statement of facts, with particular reference to assuming that 30,000 cubic feet of water per second went through Wibaux. That was your contention?

A. Yes, that was the general line of testimony.

Q. I now call your attention to page 382 and ask you to read that page; and you may read a page or two preceding that, and a page or two following that, and see if that particular testimony, given on direct examination, being questioned by Mr. Maury, was in any way based on a hypothetical statement of facts?

A. No, I would say that this was a direct answer, —I think so.

Q. You are now referring to line 20 of page 382. May I now read? “Mr. Lyman, did you tell us how many cubic feet per second you would estimate that could have been going by Massey’s under the marks and having in view the grade of the stream?” An-

(Testimony of R. A. Lyman.)

swer: "I estimated 30,000 cubic feet could have gone by in the main stream at Massey's, disregarding any slowing up due to back-water."

Q. And that was your testimony in that trial?

A. Undoubtedly.

In ascertaining the amount of cubic feet of water per second, the application of Chezy's and Kutter's formulae is for use in connection with ascertaining the velocity; the problem is to get the velocity.

Q. No matter what the grade is, or where you take it, if you once get your velocity, it is an easy matter to get it by multiplying the velocity ascertained in feet-per-second,—multiply it by square feet on a given area?

A. If you get your velocity correct, you can get your cubic-feet-per-second correct.

Q. Now, you computed it—if you had conceded that there was 1190 square feet of opening at the railroad bridge over Beaver Creek——

A. I think so.

Q. The testimony shows that the water got up to the girder and [598] filling that entire area, you told us also that the velocity at that place was 27 feet per second?

A. The velocity just below that place.

Q. Mr. Lyman, multiplying 1190 square feet by 27 feet per second gives you more than 30,000 cubic feet per second?

A. I would suppose so.

Q. And if you had 30,000 cubic feet of water going out, how could you have 30,000 cubic feet

(Testimony of R. A. Lyman.)

going through the bridge, if you had only 16,000 running into it up above?

A. No. I never said you had 30,000 running through the bridge.

Redirect Examination

I have always at all of these trials, whenever it has been asked me, announced that there was, in my opinion, backwater at Massey's.

Q. And the question that was asked you was answered with that very provision?

A. I had it in mind; I don't know how I worded it, no.

Q. And have you always explained that the Kutter's formula had to be modified at Massey's in view of this back-water that existed there?

A. There would be no way of modifying Kutter's formula. Your results wouldn't be correct if there was an added height to the back-water there. As to whether that would lessen the amount of flow by the place, will state that if there was back-water, it would give you a larger answer to your problem than would be true if there was none there; and I tried always to explain that whenever it was asked me.

Q. Now, Mr. Lyman, (this is a very nice trick-question that the counsel asked), the speed of the water that counsel spoke of was where with reference to the bridge?

A. It is right at or below, the bridge. It is due to a 10-foot back-up of water there giving that 27 feet per second to the water that was left below, not

(Testimony of R. A. Lyman.)

to the height, so the water going through the bridge should [599] not have been attempted to be found out by multiplying the height above the bridge by the speed as it left the bridge,—of course not; the velocity is due solely to that 10-foot head of back-water.

Q. So that in finding out how much was going through the bridge, you would multiply the height—the cross section just below the bridge—and there would be a difference of some 10 feet?

A. It would just about cut the quantities—as he tried to make me say—in two.

Q. And the only estimate you have ever given of your own figures, at any trial, of the amount of water that you computed to be flowing by Massey's was 15,800 or roughly, 16,000 cubic feet per second?

A. That is the only one I did make for an estimate; I did estimate that 30,000 could have gone through.

Q. And I believe you did answer that if there had been a bridge 180 feet wide, that even 33,000 could have gone through the town?

A. Yes, sir.

Q. Or to the plaintiff's property?

A. That was true.

Q. That was true, and that was at the trial where the witness, Dean Shenehon, was a witness for the defendant, that a 189-foot bridge——

Mr. McCARTHY: I object to counsel making a statement of something that has no place at this

(Testimony of R. A. Lyman.)

time, going to the jury and you can't get it out.

Mr. MAURY: What I was asking the witness has been read in the record here by Mr. Lillis, on the stand.

Mr. McCARTHY: Why repeat it here?

Mr. MAURY: Because we want Mr. Lyman's opinion as well as Mr. Lillis'.

The COURT: Is this in rebuttal of Mr. Lillis' testimony?

Mr. HALL: No; he said he asked Mr. Lillis if he read Mr. Lyman's testimony on some point.

(Question repeated): "That was true, and that was at the trial [600] where the witness, Dean Shenehon, was a witness for the defendant, that a 189-foot bridge——" (Mr. Maury continuing with question): "189-foot bridge would have taken 33,000 cubic feet per second without any water in Wibaux above one foot?" (adding when question repeated): "without causing damage to the plaintiff's property?"

A. I think that was roughly the testimony; yes, sir.

Q. And you gave your estimate then as a 179-foot bridge, or 180?

A. I don't remember—my figures.

Recross Examination:

When the water was going through the bridge so that the entire capacity of the bridge was taken

(Testimony of R. A. Lyman.)

up, there was a lot of water going through the viaduct. As to whether the viaduct had about 500 square feet of area there, will say that I never seen any figures that a man could make any figures on the viaduct.

Q. Have you measured the viaduct?

Mr. MAURY: We object. There is a different viaduct there than on June 7, 1929.

The COURT: Very well; what were the conditions on June 6, 1929?

Q. You could form some approximation?

A. I never seen any estimates what I considered very reliable as to the depth of the water going through the viaduct.

Q. Assuming there was 500 square feet of area under the viaduct, and you have previously testified it was your opinion the water going through there was 18 feet per second?

A. Yes, sir.

Q. That would mean 10,000 cubic feet in addition going through, wouldn't it?

Mr. MAURY: We object,—something not in this case.

Q. Mr. Lyman, will you take your engineer's rule and consider the——

Mr. MAURY: We must object, that those particular measurements on the viaduct are not supposed to be exact surveys, or anything connected with it. We would have to open our case [601] to show the exact measurements of the viaduct so far as we could.

(Testimony of R. A. Lyman.)

The COURT: Are the exact measurements in evidence?

Mr. McCARTHY: I don't think the exact measurements are in evidence.

A. The worst objection was that the condition there as it existed at the bridge was that that water had taken a 6-foot drop.

Q. Can you give us by taking the engineer's rule on that viaduct, give us something about what the dimensions are? (witness measuring). Calling your attention to defendant's exhibits D-23 and D-24, Mr. Lyman, particularly to defendant's D-23; is the viaduct and the dimensions of it shown on here?

A. Outline; yes, sir. The dimensions shown on the exhibit referred to, I can't quite figure them out as yet. There is three bents of piling apparently, two center ones 18 feet apart, which would be 36 feet, plus some opening, probably about—as it scales, probably about 50 feet wide. Now, I can't figure these depths, just what they mean; the depth of 10 feet would give it about the 500 which you are trying to get.

Q. Would it be fair to say 500 would be the maximum and, for our computation here, take it 400 feet for the computation? As to the area here, would 400 be giving the plaintiff the edge——

Mr. MAURY: We don't want any edge on you and we don't want you to take any on us.

Q. Mr. Lyman, from your examination of the

(Testimony of R. A. Lyman.)

relief map and from defendant's D-23, can you tell us now approximately the opening under the viaduct?

A. I think the opening to the rails on the top of the viaduct would perhaps have 500 square feet of area in it; and 500 times 18 is 9,000.

Redirect Examination:

Of course, no such quantity of water could have been going through the viaduct; the 18 is for the elevation of the [602] water, after the water had taken the 6-foot drop; four feet would be 200 square feet instead of 500,—would be the maximum you could have; that would be 3,600 maximum. As I understand the testimony, the water never filled to the top of the viaduct—never got to that height. I remember Dean Shenehon referred to the water going through the viaduct, at the first trial, and took it into consideration with reference to the size of the bridge opening required here. And as to whether I took it into consideration on the estimate I gave once for 33,000 cubic feet a second, will say, if I remember that testimony, it was assumed that 10,000 cubic feet went through both openings in 1921, and assuming that 30,000 feet,—that that 10,000 went through without doing any material damage to the town, then assuming that 30,000 did come and the conditions remained the same at the viaduct, that a bridge a little less than three times as long as the existing bridge would have carried the 1929 flood with no more damage

(Testimony of R. A. Lyman.)

than the 1921 flood. I answered that a bridge three time as long would have carried it, and I believe that was Shenehon's testimony.

PLAINTIFF RESTS.

SURREBUTTAL

B. C. LILLIS,

called as a witness in behalf of the defendant in surrebuttal, testified:

Direct Examination:

(By Mr. McCarthy).

If you have ascertained the velocity, and have given the square area of a cross section, it is proper to multiply those two factors together to ascertain the amount of water going through that cross section; you thereby ascertain the cubic feet of water per second. [603]

Q. Did you hear Mr. Lyman's testimony that that formula would not apply if there was back-water at the bridge?

Mr. MAURY: Back-water at the bridge? Back-water at Massey's.

Q. The effect of back-water at the bridge, and therefore, that would not apply—multiplying the feet per second by the area.

A. Yes. I will give you my views as to whether that would or would not apply: By taking the

(Testimony of B. C. Lillis.)

actual fall of water level, which is the proper way of determining the grade, any back-water effect is taken care of when you take that difference in elevation.

Cross Examination:

(By Mr. Maury).

Q. Back-water at the county bridge is where you got an estimate of 46,000 cubic feet going by the county bridge?

A. I didn't quote 46,000 as the quantity going by, Mr. Maury. I said the conditions were such that you couldn't rely on those figures.

Q. But you did get an answer to certain calculations by Kutter's formula, showing that 46,000 was going by, but you didn't believe that was correct?

A. I wouldn't call that my answer, because I didn't take out the area of obstructions in that section.

Q. Where did you get the figures 46,000 cubic feet per second by this cross section here, by the county bridge? Where did you get that?

A. That would be the theoretical answer, ignoring the area of those obstructions along those buildings. But I didn't publish that figure and didn't take it as a fact, and did not take out the area of those buildings. But that was the theoretical answer by Kutter's formula, of water going by on June 7, 1929.

(Testimony of B. C. Lillis.)

Redirect Examination:

My position is, as you understand it, that I could not take the cross section at First Avenue without taking into consideration and going to considerable computation,—without considering the area of the buildings. There are no buildings [604] immediately to the south of the railroad bridge.

Recross Examination:

There are no buildings immediately to the south of the viaduct until you get to the edge of the right-of-way there, the south side of Orgain Street.

DEFENDANT RESTS.

MOTION.

Mr. HALL: Comes now the defendant at the close of all the evidence and moves the Court for an order directing a verdict in favor of the defendant upon the following grounds:

1. That the plaintiff has failed to prove by any substantial evidence, any of the acts of negligence charged against the defendant.
2. That the evidence shows without any substantial conflict, that the damage sustained by the plaintiff was caused by an unusual, excessive and extraordinary rain and flood which the defend-

ant could not have reasonably anticipated by the exercise of ordinary care and foresight.

3. That the plaintiff has failed to prove any negligence of the defendant in the construction and maintenance of said embankment and openings therein, as they existed on June 7, 1929.

4. That the evidence shows without any substantial conflict, that the bridge and bridges as constructed and maintained by the defendant from 1881 up to June 7, 1929, never caused any damage to said plaintiff, or to the property that was occupied by said plaintiff on June 7, 1929.

5. On the further ground, that even if there was negligence on the part of the defendant in obstructing the ordinary flow of water in said stream during ordinary high water, that the evidence shows that such negligence was merely general negligence, and [605] did not cause any damage to plaintiff at any time.

6. Upon the further ground, that the evidence shows that there was no actual negligence on the part of the defendant against said plaintiff.

7. That the evidence shows that water would have reached and flown through the plaintiff's property and damaged same to some extent, if there had been no railroad grade or embankment, and that plaintiff has wholly failed to show what damages, if any, he has sustained over and above the damage he would have sustained by the water that flowed through his building, irrespective of the existence of the railroad bridge and embankment.

The COURT: I think I will have to deny the motion, Mr. Hall.

Mr. HALL: All right; note our exception. [606]

The cause was thereupon argued to the jury by counsel for the respective parties and thereafter, the Court instructed the jury as follows:

CHARGE TO THE JURY

Gentlemen of the Jury, you have heard the evidence in the case and the arguments of counsel. It now becomes necessary for the Court to deliver the instructions, otherwise called the Charge to the Jury. This relates more especially to the law of the case than the facts, although sometimes the Judge comments on the facts and whenever he does so, he must inform the Jury that they are the sole judges of the facts of the case and that they have a right to disregard any comments that might have been made by the Court, if they see fit to do so.

As you have observed, the counsel for the respective parties have pretty thoroughly covered the facts; they have argued nearly all, we should say, of the important features of the case in an able manner; their respective theories have been presented here at this trial for several days. You have been patient and the Court has observed that you have given careful attention to the evidence—as trying and tedious as it may have seemed to you in many parts. You are to be congratulated in that respect for the consideration you have apparently

given all the details of the evidence presented to you here upon the trial of this case.

As I said before, you are the judges of the facts, the credibility of witnesses, and the weight to be given to the testimony in the case. The Court gives you the rules of law that you are to apply in interpreting the testimony and you accept those rules of law, no matter what individual opinion a juror might have as to what the law might be or should be, it is your duty to accept the rules of law given you by the Court, as the Judge accepts your judgment as to the facts represented by your verdict. That is probably a very proper arrangement. Congress in its wisdom, saw [607] fit to entrust the Court with those duties—to deliver to the Jury the rules of the law, and to apply the facts to a given case. If the Jury were permitted as it has been in some courts, to resolve both the law and the facts, it might result in some confusion and certainly in great difficulty, because we find that it is somewhat difficult for the Jury to agree on the facts or to agree on a verdict.

Now, at the beginning of the trial, counsel called your attention to the pleadings in the case. That was several days ago; and it is proper and fitting now that at this time, your attention should again be called to the pleadings in the case. As you know, this is an action of a civil nature. Heretofore, we have had to do with criminal cases—where proof must be made beyond a reasonable doubt. In a case of this nature proof must be made by a preponderance of the evidence; that may be explained to you.

The issues in this case—a civil case—are made up by the filing of a complaint on the part of the plaintiff, of an answer on the part of the defendant and of a reply on the part of the plaintiff, dealing with any new matters set up in the answer.

Now, to begin with the pleadings. As you know, the title of the case is “Nick Wagner, plaintiff, vs. Northern Pacific Railway Company, a corporation, M. L. Hare and John Presthus, defendants.” The last two defendants have been eliminated from the case. (reading complaint) This is a statement of the substance of paragraph I of the complaint, which is admitted by paragraph I of the answer itself, which states 342 square miles instead of 720. (reading par. II). Paragraph II of the answer admits the substance of par. II of the complaint, but alleges that the railroad had so crossed the valley on this embankment, and so forth. Par. III of the complaint relates to the defendants Hare and Presthus, heretofore referred to as having been dismissed. (Reading par. IV of [608] complaint). This par. IV is denied by the defendant. (Reading par. V). This paragraph is also denied by the defendant railway company. (Reading par. VI). This paragraph is also denied by the defendant railway company. (Was there an amendment made to the complaint known as par. VI½? Mr. Maury: Yes, sir; I believe at one of the early trials the amendment was made). Well, that accounts for the denial appearing in the answer, of par. VI½, so we will disregard that; that is not before us. (Par. VII): (reading). That paragraph is also denied by the defendant railway company.

The defendant then, in its answer: (reading paragraphs I, II, III, IV, V, VI, VII) (Mr. Hall: That I have amended, if the Court please, to "about 8:00 or 9:00 o'clock". Mr. Maury: Which is it, 8:00 or 9:00? The Court: Well, say "8:00 or 9:00 o'clock, on June 7, 1929"). There are two other separate defenses set forth in here which the Jury will disregard; they are not to be considered by you as a part of the case.

The reply of the plaintiff to this answer is as follows: (reading reply). That part of the reply as relates to the second and third defenses is to be disregarded by you; that has been excluded from the case.

Gentlemen, as to the rules of law that you are to consider in connection with the evidence:

You are instructed that in civil cases the affirmative of the issues must be proved, and that when the evidence is contradictory the decision must be made according to the preponderance of the evidence; and that in this case it devolves upon the plaintiff to prove his claim by a preponderance of the evidence, and likewise, upon the defendant to prove the affirmative allegations of its answer by a preponderance of the evidence.

By preponderance of the evidence is meant the greater weight. The preponderance of the evidence in a case is not alone determined by the number of witnesses testifying to a particular [609] fact or state of facts. In determining upon which side the preponderance of evidence it, the jury should take

into consideration the opportunities of the several witnesses for seeing or knowing the things about which they testify; their conduct and demeanor while testifying; their interest or lack of interest (if any) in the result of the suit; the probability or improbability of the truth of their several statements, in view of all of the other evidence, facts and circumstances proved on the trial; and from all these circumstances determine upon which side is the weight or preponderance of the evidence.

If you believe that any witness who has testified in this case, has knowingly and wilfully testified falsely concerning any matter or fact material to the elements of the cause of action charged herein, as defined in these instructions, his or her testimony is to be distrusted by you as to all other matters to which he or she testified.

You may not arbitrarily and capriciously disregard testimony of a witness who is not impeached in any of the usual modes known to the law, but whose testimony is reasonable and consistent with all the circumstances proved, bearing upon the material issues involved in this case.

The usual modes of impeachment of a witness, known to the law, as mentioned in the preceding instructions are:

1. By proving contradictory statements previously made by the witness as to matters relevant to his testimony in the case;
2. By disproving facts testified to by him, and
3. By evidence as to his general bad character.

But whether a witness has been impeached is solely for the jury to determine from all the evidence in the case.

The direct evidence of one witness who is entitled to full credit is sufficient proof of any fact in this case.

A witness entitled to full credit is one whose statements [610] upon the witness stand are within reason and believable.

You gentlemen, as I stated before, are the sole judges of the effect, value and weight of the evidence in this case, and of the credibility of the witnesses. It is solely and exclusively your duty to determine the facts, and this you must do from the evidence presented to you and then apply the law as given you in these instructions to the facts as you find them.

Every witness who has testified in this case is presumed to have spoken the truth. This presumption, however, may be repelled by the manner in which he testifies, by the character of his testimony or by contradictory evidence.

In determining the credibility of any witness you are to take into account in weighing his testimony, his interest or want of interest in the result of the case, his appearance upon the witness stand, his manner of testifying, his apparent candor or want of candor, his intelligence or lack of intelligence, his means of knowledge as to any fact about which he testified, his apparent fairness or lack of fairness, and whether he is supported or contradicted by the facts and circumstances in the case as shown by the evidence.

In determining what are the facts in this case you are not bound to decide in conformity with the statements of any number of witnesses not producing conviction in your minds against a less number, or against other evidence satisfying your minds, or against a presumption created by law.

You are instructed, as a matter of law, that in considering and determining the question whether the defendant was guilty of negligence in doing or failing to do any of the acts alleged in the complaint to have been negligently done or omitted that the burden of proof is upon the plaintiff to prove, by a preponderance of the evidence, which means by a greater weight of the evidence, not only that such act or acts or omissions were negligently done or [611] omitted, but also that such plaintiff's damage was caused by the act or acts of negligence charged and not due to some other cause.

Your conclusions must be based upon facts shown by the evidence and not upon inferences, which may be based upon inference, or presumptions, which may be based upon presumptions. Nor must your conclusions be based upon conjecture, surmise or speculation, however, shrewd or ingenious such conjectures, surmises or speculations may be.

If the evidence is evenly balanced, or if you are in doubt therefrom as to whether the damage the plaintiff sustained was due to any of the acts of negligence charged, or to some other cause, then your verdict should be for the defendant, and against such plaintiff.

Before the plaintiff herein can recover against the defendant, such plaintiff must prove that a proximate cause of the damage to plaintiff's property was the negligence of the defendant; it must appear from the evidence that the damage was the natural and probable consequences of the negligence of the defendant; and that some damage ought to have been foreseen by the defendant in the light of the attending circumstances. The first requisite of a proximate cause is the doing or omitting to do an act, which a man of ordinary prudence could foresee might naturally and probably produce damage; and the second requisite is that such act or omission did actually cause the damage.

If, therefore, you find from a preponderance of the evidence that, in constructing said embankment and openings therein, as they existed at the time of this flood, the negligence, if any, of the defendant, was not a proximate cause of the damage to the plaintiff herein, as that term is defined herein, or if you find that the property of such plaintiff would have been damaged had said embankment and openings therein never existed, then the construction of said embankment and openings, as the evidence shows [612] the same existed at the time of this flood, was not a proximate cause of the damage to plaintiff's property, and the defendant cannot be held for such damage.

The defendant, as a defense to this action, has alleged that the damage to plaintiff's property was the result of an unusual, excessive and extraordinary

rain and flood, which, by the exercise of reasonable foresight and prudence on its part, could not have been anticipated or prevented. When damage is the result of such a cause, it is commonly known in law as one caused by "an act of God", and by the term "Act of God", is meant those events and accidents which proceed from natural causes which cannot be reasonably anticipated or guarded against, such as unusual, excessive and extraordinary rains, freshets, floods, earthquakes, severe winds, cyclones, lightning and such like. For damages occurring solely by any of such causes, there is no liability and the party sustaining injury thereby cannot recover therefor.

In order for a rain, flood, wind, storm, or the like, to be classed as an act of God, it is not necessary to prove that it was the worst or most severe that ever occurred in that locality. It is sufficient to constitute it an act of God, if it is shown that it was such an unusual, excessive and extraordinary rain, flood, storm, or wind that, in the usual and customary conduct of a business in a reasonably prudent manner, it could not have been reasonably anticipated or guarded against.

If you believe from the evidence that the Railway Company, in raising the embankment of its railroad grade and constructing its bridge across Beaver Creek in 1898, employed civil engineers of at least ordinary skill and ability, and that it constructed, and thereafter maintained, the embankment and openings in question in accordance with the usage

of ordinarily prudent and careful engineers under like circumstances, and so as to reasonably handle and care for such ordinary recurring floods or [613] rises in Beaver Creek as were then known and as could be reasonably anticipated by the exercise of ordinary foresight and prudence, and that said openings did handle, in a reasonable manner, all flood waters prior to June 7, 1929, and that the flood of June 7, 1929, was an unusual, excessive and extraordinary flood, which could not have been reasonably anticipated, then the defendant was not guilty of negligence; but the damage to plaintiff was the result of such extraordinary flood or act of God and your verdict should be for the defendant.

Evidence has been introduced showing that after the flood of June 7, 1929, the defendant constructed a new bridge over Beaver Creek, which is longer than the bridge that existed there on June 7, 1929.

You are instructed that such evidence was not admitted for the purpose of showing negligence in the construction of the bridge that was there in June, 1929, and cannot be considered by you for such purpose.

The negligence, if any, of the defendant depends upon what it did and knew before June 7, 1929, and such negligence, if any, must be established by facts and circumstances which preceded that date and not by acts done thereafter in repairing or rebuilding the bridge.

A water course or stream is the channel cut by running water with well defined banks and bottom

through which water flows for substantial periods of each year.

In constructing a railway bridge, the law does not require that the full width of such channel be left open but only that the water course be restored to its original state of usefulness, as near as may be. The phrase "as near as may be", as used in this law, does not mean "as near as might be possible." It contemplates some variation from the original condition of the stream and allows some discretion in the engineers of the railway [614] company in constructing a bridge to make such reasonable changes in the flow of the water therein as they find necessary in constructing a safe and practical bridge over the stream.

Even if you find from the evidence that the channel was somewhat narrowed by the bridge, as constructed in 1896 and raised in 1898, but also find that the channel was then, or thereafter, straightened and deepened, so that it still carried off all the water which could have been reasonably anticipated by the exercise of ordinary foresight and prudence, including the ordinary flood waters, without any more interference with the flow thereof, than was reasonably consistent with the right granted the railway company to construct a safe and practical bridge over such stream, then you are instructed that there was no unlawful interference with the water course or channel of the stream by the defendant, and that it cannot be held guilty of negligence in the construction and maintenance of such bridge over the stream as it existed prior to June 7th, 1929.

If you find that the openings in said embankment were large enough to handle, in a reasonable manner, the flood waters of Beaver Creek, prior to June 7, 1929, and that they did not impair the usefulness of the stream to a greater extent than was reasonably necessary in order to construct a safe and practical bridge, and further find that the flood on June 7, 1929, was an unusual, excessive and extraordinary flood, which could not have been reasonably anticipated by the exercise of ordinary foresight and prudence, then you are instructed that the fact, if you find it is a fact, that the openings in the embankment as they existed on June 7, 1929, were not large enough to properly carry off the water in Beaver Creek on that date, would not render the defendant liable for damages resulting from such impounded water.

If you believe from the evidence that plaintiff's property was damaged by the flood waters of Beaver Creek on June 7, [615] 1929, and that damages thereto would have been sustained by plaintiff, in whole or in part, irrespective of the presence or condition of the railway embankment and openings therein, then the plaintiff cannot recover for such damages as you find would have been sustained regardless of the existence of such embankments and openings.

The defendant can only be held liable for such damages as the plaintiff proves, by a preponderance of the evidence, was caused by the negligence of the defendant and which negligence was a proximate cause of such damage.

The defendant can only be held liable for damages due to its negligence and in no event can be held liable for any damage that you believe plaintiff would have sustained had there been no embankment or bridge there at all.

If you believe from the evidence that the property of plaintiff would have been flooded to some extent and partially damaged by the flood waters of Beaver Creek on June 7, 1929, even if no railway embankment or bridges had existed there at all on that date, then the burden of proof is upon the plaintiff to prove the amount of damages, if any, sustained by flood water, if any, in excess of the water that would have gotten into their premises had there been no railway embankment and bridges.

And if the evidence is such that you are not able to reasonably determine therefrom what damage, if any, the plaintiff sustained by reason of water, if any, in excess of what you believe would have gotten into their property had there been no railway embankment and bridges at all, then you are instructed that plaintiff has failed to prove such damages and your verdict should be for the defendant.

In the event you should find a verdict in favor of the plaintiff, it will then become necessary for you to determine the amount of damages, if any, sustained by the plaintiff, by reason of [616] the existence of said embankment and openings therein, but not to include in your verdict damages, if any, which you believe plaintiff may have sustained in-

dependent of such cause, as is elsewhere explained in these instructions.

The burden of proof is upon the plaintiff to prove the damages, if any, alleged to have been sustained by reason of the alleged negligence of the defendant.

The plaintiff alleges that he owned a stock of men's and boys' clothing, cloths, rubber goods and haberdashery, situate in the building at the north-east corner of Wibaux Street and First Avenue South, of the value of more than Eighteen Thousand (\$18,000) Dollars, and that the same was soaked, damaged and impaired in value to the amount of \$15,000.00.

In this connection, you are instructed that the damage, if any, for loss of business cannot be recovered if the evidence shows the profits therefrom were speculative, contingent or uncertain; the plaintiff is only entitled to recover for loss of business, such profits as could reasonably have been earned, after deducting all proper and necessary expenses for carrying on the business during such period. Such profits, if any, are to be determined by the jury from all the facts and circumstances in the case.

The damages for alleged expenses paid for material and labor for cleaning the building, walls, etc., after the flood, would be a reasonable sum for such material and work which may or may not be the amount actually paid therefor. The reasonable amount of such material and work, regardless of

what was paid therefor, is to be determined by the jury from all the facts and circumstances in the case.

The damage to the machinery, furniture, fixtures, merchandise and other items mentioned above would be the difference between the market value or reasonable value thereof immediately [617] before the flood and the reasonable value after the flood was over.

In determining the reasonable value, you are not bound to accept, as conclusive, the opinion of witnesses, if any, giving their estimates of the value, but you may use your own judgment therein, based upon all the facts and circumstances in the case.

The plaintiff has asked for interest at the rate of eight per cent. per annum from June 8th, 1929, on the amount of any damages which you may find he has sustained by reason of the alleged negligence of the defendant.

You are instructed, as a matter of law, that the plaintiff is not entitled to interest as a matter of right, but whether or not interest should be allowed on such damages, if any, and for what period of time, is a matter resting wholly in your discretion.

Hence, if you find for the plaintiff, it rests with you to say whether he should also have interest or not, and if you decide that interest should not be allowed, you will make no mention thereof in your verdict, but if you decide to also award interest, then you should compute the same and insert the amount thereof in your verdict, as a separate item from the damages found.

Interest, if allowed, may be computed at the rate of eight per cent. per annum prior to March 15, 1933, and at the rate of six per cent. per annum since that date.

I charge you that the law recognizes but one degree of care, and that is called ordinary care. But ordinary care varies with and is proportionate to, and measured by the danger of the surrounding circumstances. What might be ordinary care in handling a force or situation or set of circumstances involving little danger to the lives or safety of others, might be negligence in handling the force or power or set of circumstances, of imminent danger to the lives and safety of others. As the danger increases, the degree of care required by the law increases.

Every railroad corporation has power to construct a road [618] across or along or upon any stream of water or water course in such manner as to secure life and property. But the corporation shall restore the stream or water course intersected, to its former state of usefulness as near as may be, and so that the railroad shall not unnecessarily impair its usefulness. When the railroad acts under such permission, it is in duty bound to restore the stream to its original usefulness as near as may be, either for drainage of nearby property or for irrigation.

The burden of proof is upon the defendant railway company to show by a preponderance of,—that is, a greater weight of the evidence, that there

was an act of God, as defined in these instructions, and if the evidence is evenly balanced on that issue, or if it preponderates in favor of Wagner, the plaintiff, you will find that issue in favor of Wagner and against the railway company.

Even if you believe from the evidence that the railroad company in constructing its bridge across Beaver Creek in 1896 and 1898, employed engineers of ordinary skill and ability, and even if the railroad then used reasonable care and skill in the construction of the bridge, yet if you find from the evidence that the opening at the bridge thereafter had been substantially narrowed so that it would not reasonably handle all of the ordinary flood waters, or if subsequent experience proved that whatever opening there was for water was not sufficient to carry away waters which would be reasonably anticipated, then suitable provision should have been made to permit such waters to flow unobstructed, within a reasonable time after discovery that the opening or openings were insufficient.

If you find from a preponderance of the evidence that Wagner suffered damage in the flood of June 7, 1929, at Wibaux, and that there were two causes which combined to produce the damage, and that both of said causes were proximate causes, as defined [619] elsewhere in the charge of the Court; and that one of such causes was one or more of the culpable negligent acts of the railway company set out in the complaint, and that the other of said causes was an act of God, then by your verdict, you

should hold the railway company liable for the loss resulting from both such concurring causes, provided you should further find that the loss would not have been sustained by Wagner but for some culpable negligent act of the railway, alleged in the complaint.

Testimony has been given by certain witnesses who, in law, are termed experts, and in this connection you are advised that, while in cases such as the one being tried, the law receives the evidence of men, expert in certain lines, as to their opinions derived from their knowledge of particular matters, the ultimate weight which is to be given to the testimony of expert witnesses is a question to be determined by the jury, and there is no rule of law which requires you to surrender your own judgment based upon credible evidence to that of any person testifying as an expert witness; in other words, the testimony of an expert, like that of any other witness, is to be received by you and given such weight as you think it is properly entitled to.

The value of such testimony depends upon the circumstances of each case, and of these circumstances the jury must be the judges. When expert witnesses testify to matters of fact, from personal knowledge, then their testimony as to such facts within their personal knowledge should be considered the same as that of any other witnesses who testify from personal knowledge.

As to the answers of experts to hypothetical questions, you are advised that the weight to be

given to such answers must in the first place, depend upon the truthfulness of the facts assumed, and the party calling a witness, so testifying, must establish the premises included in the hypothetical question by a preponderance of the evidence. [620]

In determining what are the facts in this case and what verdict, if any, you should return, you will take into consideration only the testimony of the witnesses upon the witness stand in this case and such documentary evidence and exhibits as have been admitted.

You must not allow yourselves to consider or be in any manner influenced by anything which you may have seen, heard or read outside of the evidence and exhibits in this case.

Your verdict must be based solely upon the evidence and instructions of the Court presented and read to you in the course of the trial.

By no remark by the Court during the trial, nor by these instructions or otherwise, does the Court or did the Court express any opinion as to the facts in the case. It is for you and not the Court to determine what the facts are.

You should not give any weight to statements of counsel heretofore made to you, which are not supported by the evidence presented to you and by the instructions of the Court. Counsel are, however, privileged to argue and comment upon the law as given you in these instructions, in their arguments to you.

It is your duty to weigh all the evidence, and reconcile it, if possible; but if you find serious conflict in the evidence, then you should take the evidence which you consider worthy of credit, and give it such weight, under the rules of law submitted to you by the Court, as you believe it is entitled to receive.

It takes twelve of your number, concurring, to agree upon any verdict which you may return in this case.

When you retire to your jury room, you should select one of your number as Foreman, and he will sign your verdict, in the event you arrive at a verdict.

Mr. MAURY: Plaintiff has no objections and no exceptions. [621]

Mr. McCARTHY: The defendant excepts to that portion of the charge beginning: "If you find from a preponderance of the evidence":—

"If you find from a preponderance of the evidence that Wagner suffered damage in the flood of June 7, 1929, at Wibaux, and that there were two causes which combined to produce the damage, and that both of said causes were proximate causes, as defined elsewhere in the charge of the Court; and that one of such causes was one or more of the culpable negligent acts of the railway company set out in the complaint, and that the other of said causes was an act of God, then by your verdict, you

should hold the railway company liable for the loss resulting from both such concurring causes, provided you should further find that the loss would not have been sustained by Wagner but for some culpable negligent act of the railway, alleged in the complaint.”

My reason for excepting is the use of the words, largely, “culpable negligence”, it being our contention that there is no evidence whatever in the case to support the submission of any question of culpable negligence on the part of the defendant, and we except to the Court submitting the issue at all to the jury on the theory it is conceded by all the evidence in the case, particularly by the plaintiff himself, that some water would have reached the Wagner store even if there were no railroad bridge or embankment, and therefore, to permit the jury to pass on the question of damages would be permitting the jury to enter the field of conjecture and speculation.

Thereupon, the jury retired to deliberate and thereafter, and on the 5th day of April, 1934, returned into Court with its verdict, in words and figures as follows, to-wit: [622]

[Title of Court and Cause.]

VERDICT

We, the jury in the above entitled case, find our verdict in favor of Nick Wagner, and against the

railway company, defendant, and we assess Wagner's damages at the sum of 5000.00 Five Thousand Dollars.

JOSEPH G. PARKER

Foreman of the Jury.

(Filed April 5, 1935)

On April 5, 1934, the court made the following order:

[Title of Court and Cause.]

"Thereupon, on motion of Mr. Jameson, defendant was granted 60 days in addition to the time allowed by rule, in which to prepare, and serve a bill of exceptions."

Thereafter, pursuant to stipulation of parties filed in said cause, consenting to the granting of an extension of time to and including July 31, 1934, in which to prepare, serve and file defendant's bill of exceptions, the court, on June 4, 1934, made the following order:

[Title of Court and Cause.]

"Pursuant to stipulation of counsel filed in the above entitled cause, it is hereby ordered that the defendant may have to and including the 31st day of July, 1934, in which to prepare, serve and file a bill of exceptions in the above entitled cause."

The defendant now presents this, its Bill of Exceptions in the above entitled cause, and asks that the same be signed, settled and allowed as a true and correct Bill of Exceptions herein.

Dated: July 16, 1934.

FREDRICK D. McCARTHY
JOHNSTON, COLEMAN & JAMESON,
GUNN, RASCH & HALL,

Attorneys for Defendant.

Service of the foregoing Bill of Exceptions and the [623] receipt of a true copy thereof, is hereby acknowledged this 18 day of July, 1934.

T. C. COLTON

See first cases.

H. L. MAURY

Attorneys for Plaintiff

The foregoing draft of the foregoing Bill of Exceptions taken at the trial of this cause, was delivered to the undersigned, Clerk of said Court, for the Judge of said Court, on the 31st day of July, 1934.

C. R. GARLOW

Clerk

By C. G. KEGEL

Deputy

CERTIFICATE SETTLING AND ALLOWING
BILL OF EXCEPTIONS

It appearing that the foregoing Bill of Exceptions, consisting of 570 pages, numbered from one to five hundred seventy, inclusive, having been presented by the defendant, Northern Pacific Railway Company, a corporation, as its proposed Bill of Exceptions in the above entitled cause, and the foregoing having been made to truly represent all of the proceedings heretofore had in said cause, and the same being now a full, true and correct statement of all proceedings had therein, the same is hereby settled and allowed by the Judge of this Court and certified to as the Defendant's Bill of Exceptions taken at said cause and is hereby declared and certified to be a full, true and correct record of said cause and all of the matters and proceedings therein, including the testimony taken at the trial.

Dated this 2nd day of August 1934.

CHARLES N. PRAY

Judge.

[Endorsed]: Filed: August 2, 1934. [624]

Thereafter, on May 14, 1934, Petition for New Trial was duly filed herein, in the words and figures following, to-wit: [625]

[Title of Court and Cause.]

PETITION FOR NEW TRIAL.

Now comes the defendant, by its counsel, and petitions the Court to set aside the verdict heretofore rendered herein and to grant defendant a new trial in this cause and for grounds of said petition presents and shows to the Court the following, to-wit:

I.

Insufficiency of the evidence to justify the verdict.

In this connection, your petitioner sets forth the following particulars wherein the evidence is claimed to be insufficient to sustain the verdict.

Plaintiff's action is based upon the allegation that the defendant constructed a railway embankment across the Beaver Creek valley and negligently failed to construct and maintain a bridge over the channel of Beaver Creek or openings in said embankment sufficient to permit the free flow of water "in ordinarily seasonally recurring high water" (paragraph 4 of complaint). The defendant denied all the allegations of negligence and alleged that the damage to plaintiff's property was due to an unusual, extraordinary and unprecedented flood which the defendant could not have reasonably anticipated. (Paragraph 6 of answer). [626]

(a) Upon the issues thus raised, the evidence is insufficient to establish or prove that the bridge over said creek was not sufficient to properly handle all ordinary recurring high water flowing in said stream prior to June 7, 1929, without causing any damage to plaintiff's property or to the property that was occupied by plaintiff on June 7, 1929. On the contrary, the evidence shows that the permanent bridge, as constructed in 1896 and raised five feet in 1898, and which remained there until June 7, 1929, did at all times handle all flood waters without causing any damage to the plaintiff's property or to the property that was occupied by him on June 7, 1929.

(b) The evidence is insufficient to prove that the defendant knew, or should have known, that a flood like that of June 7, 1929, might come down said stream and valley.

(c) The evidence is insufficient to prove that the defendant did not employ competent civil engineers of recognized ability to plan and construct the bridge over said stream, or that it was not constructed in accordance with the plans and specifications of such engineers. On the contrary, the evidence shows that the defendant did employ competent and skillful engineers and that the bridge was constructed in accordance with their plans.

(d) The evidence is insufficient to prove that the flood of June 7, 1929 was only an ordinary high water that might reasonably have been expected by the defendant. On the contrary, the evidence conclusively shows that the flood of June 7,

1929 was an unusual, extraordinary and unprecedented flood, which could not have been reasonably expected or anticipated by the defendant.

(e) The evidence is insufficient to prove that there was any negligence in the plan, construction or maintenance of the bridges over Beaver Creek as they existed from 1881 up to June 7, 1929.

(f) The evidence shows that the property of plaintiff would have been flooded to some extent had there been no railroad embankment across the valley and bridge over Beaver Creek, and the evidence is [627] insufficient to prove what additional damages, if any, plaintiff sustained by reason of the existence of such embankment and bridge.

(g) The evidence is insufficient to prove that the flood water of June 7, 1929 would not have overflowed the bank of the stream and caused the damage to the property of plaintiff before such water reached the railroad embankment and bridge over said creek.

(h) The evidence is insufficient to prove that the defendant, in constructing said bridge, did not restore the stream to its former state of usefulness, as near as may be, compatible with the construction of a safe and practical bridge for railroad operations.

(i) The evidence is insufficient to prove that the opening in the bridge over Beaver Creek, as it existed prior to June 7, 1929, was narrower than the channel of said stream at low water.

(j) The evidence is insufficient to prove any actionable negligence on the part of the defendant against the plaintiff.

(k) The evidence is insufficient to prove any of the acts of negligence charged in the complaint against the defendant.

II.

Errors in law occurring at the trial, which are as follows, to-wit:

(a) The Court erred in over-ruling defendant's objections to the following questions propounded the witness O'Keefe:

"Q. Do you recall any incidents of people being rescued in the Davis Addition, in 1921?

A. Yes, sir.

Q. Who were some of those people and where were the houses? Point them out.

A. My sister was taken from the house where I live now, in 1921.

Mr. McCARTHY: I object to this line of testimony as incompetent, irrelevant and immaterial to any issue in this case. It appears now from the exhibit in evidence, that the water, in 1921, that got in the Davis Addition would necessarily come from the sidehills and the draws. The witness has told us that the water didn't get up in the town from the creek; therefore, it would have no question on the adequacy of the railroad bridge or not; it has nothing to do with the case.

Mr. MAURY: The range or the locality is the test. In that locality, it may be gone into to show notice,—35 miles in any direction— [628]

Mr. McCARTHY: The witness says the water of 1921 didn't get up in 1921 and do any damage.

It is possible that it got up in the Davis Addition. What bearing could it have on the——

The COURT: You gentlemen ought to know. You have been through this enough. It may have some bearing on it, and I will overrule the objection. Let it be shown briefly. I don't think we need to go into all the houses.

Mr. McCARTHY: Exception." (R.——)

(b) The Court erred in overruling defendant's objections to the following question propounded the witness Drake:

"Q. Do you recall further up the track about 3000 or 4000 feet to the east, what happened in 1921?

Mr. McCARTHY: Objected to as incompetent, irrelevant and immaterial,—outside of the drainage area of Beaver Creek—and not material to any issue in this case.

The COURT: I think I will overrule the objection.

Mr. McCARTHY: Exception.

Q. What, if anything, happened to the railway track about 3000 feet to the east of the depot?

Mr. McCARTHY: In order to save time, may we have the same objection, and the ruling, and exception?

Mr. MAURY: Yes; yes.

The COURT: Yes." (R.——)

(c) The Court erred in overruling defendant's objections to the following question propounded the witness Barclay:

"Q. Now, from there on east to your ranch house, what happened in 1921 to that railroad?

Mr. McCARTHY: Objected to as being immaterial, if the Court please, not having any bearing on Beaver Creek, or the bridge over Beaver Creek, as to what happened six miles east.

Mr. MAURY: We intend to show the intensity of the flood.

The COURT: I think so; overrule the objection.

Mr. McCARTHY: Exception." (R.——)

(d) The Court erred in overruling defendant's objections to the following question propounded the witness Lyman:

"Q. How does that correspond with the area for water to go through the old railroad bridge that existed there on June 7, 1929?

Mr. McCARTHY: That is objected to, if the Court please. If he wants to compare the area under the County bridge with the area under the railroad bridge, there is no objection. Now, he proposes to go outside of the County bridge, and taking in the possibility of an overflow and compare the possible overflow of the area of the County bridge with the area of the railroad bridge. If you will compare the area under the county bridge with the area under the railroad bridge, there is no objection. This is not a proper comparison [629]

The COURT: I don't know if that is his object altogether.

Mr. MAURY: No, sir; it is to show the provision that others made for water there.

The COURT: On account of the height of the roadway you mean, and the height of the bridge?

Mr. MAURY: Yes, sir,—the proof that in high water, the water flowed around the County bridge over that area.

The COURT: I will overrule the objection. You may show it.

Mr. McCARTHY: Note an exception."

(e) The Court erred in sustaining plaintiff's objection to the certified copy from the War Department of the Army Engineers report on the Beaver Creek situation, Defendant's Exhibit D-12, offered in connection with the cross-examination of the witness Lyman: (R.———).

(f) The Court erred in sustaining plaintiff's objection to the certified copy from the War Department of the Army Engineers report on Beaver Creek conditions, Defendant's Exhibit D-12, when offered on direct examination of Defendant's witness Lillis (R.———).

(g) The Court erred in overruling defendant's objection to the following question propounded to plaintiff's witness Lyman on rebuttal:

"Q. Mr. Lyman, having heard all of the testimony of the defendant's witnesses here as to the bridge, what is your opinion as to whether any water would have gotten into the building shown to have been occupied by Nick Wagner on June 6 and 7, 1929, if there had been a bridge with openings 115 feet at Beaver Creek by the Northern Pacific Railway?

Mr. HALL: We object to that question as asking this witness to determine a question that was submitted to the jury, and improper examination on

a question of issue that should be submitted to the jury.

The COURT: Oh, yes, your experts have testified to the adequacy of the opening. Overrule the objection. Let him answer the question, if he can.

(Question repeated):

A. I believe there would have been very little, if any.

Q. By "very little", how much? A. I am very doubtful whether there would have been any. I wouldn't say whether it would have hit the floor of that building, perhaps." (R.——).

(h) The Court erred in overruling defendant's motion at the close of all the evidence for an order directing the jury to return a verdict in favor of the defendant (R.——).

(i) The Court erred in giving the following instruction to the jury, to the giving of which the defendant duly excepted, to-wit:

"If you find from a preponderance of the evidence that Wagner suffered damage in the flood of June 7, 1929, at Wibaux, and that there were two causes which combined to produce the damage, and that both of said causes were proximate causes, as defined elsewhere in the charge of the Court; and that one of such causes was one or more of the culpable negligent acts of the rail- [630] way company set out in the complaint, and that the other of said causes was an act of God, then by your verdict, you should hold the railway company liable for the loss resulting from both such concurring causes, provided you should further find that the

loss would not have been sustained by Wagner but for some culpable negligent act of the railway, alleged in the complaint.”

III.

The verdict is contrary to the law as given to the jury and particularly in the following portions of the Court’s instructions, to-wit:

“If you believe from the evidence that the Railway Company, in raising the embankment of its railroad grade and constructing its bridge across Beaver Creek in 1898, employed civil engineers of at least ordinary skill and ability, and that it constructed, and thereafter maintained, the embankment and openings in question in accordance with the usage of ordinarily prudent and careful engineers under like circumstances, and so as to reasonably handle and care for such ordinary recurring floods or rises in Beaver Creek as were then known and as could be reasonably anticipated by the exercise of ordinary foresight and prudence, and that said openings did handle, in a reasonable manner, all flood waters prior to June 7, 1929, and that the flood of June 7, 1929 was an unusual, excessive and extraordinary flood, which could not have been reasonably anticipated, then the defendant was not guilty of negligence; but the damage to plaintiff was the result of such extraordinary flood or act of God and your verdict should be for the defendant.”

“A water course or stream is the channel cut by running water with well defined banks and bottom

thru which water flows for substantial periods of each year.

In constructing a railway bridge, the law does not require that the full width of such channel be left open but only that the water course be restored to its original state of usefulness, as near as may be. The phrase "as near as may be", as used in this law, does not mean "as near as might be possible". It contemplates some variation from the original condition of the stream and allows some discretion in the engineers of the railway company in constructing a bridge to make such reasonable changes in the flow of the water therein as they find necessary in constructing a safe and practical bridge over the stream.

Even if you find from the evidence that the channel was somewhat narrowed by the bridge, as constructed in 1896 and raised in 1898, but also find that the channel was then, or thereafter, straightened and deepened, so that it still carried off all the water which could have been reasonably anticipated by the exercise of ordinary foresight and prudence, including the ordinary flood waters, without any more interference with the flow thereof, than was reasonably consistent with the right granted the railway company to construct a safe and practical bridge over such stream, then you are instructed that there was no unlawful interference with the water course or channel of the stream by the defendant, and that it cannot be held guilty of negligence in the construction and maintenance

of such bridge over the stream as it existed prior to June 7th, 1929.” [631]

“If you find that the openings in said embankment were large enough to handle, in a reasonable manner, the flood waters of Beaver Creek, prior to June 7, 1929, and that they did not impair the usefulness of the stream to a greater extent than was reasonably necessary in order to construct a safe and practical bridge, and further find that the flood on June 7, 1929 was an unusual, excessive and extraordinary flood, which could not have been reasonably anticipated by the exercise of ordinary foresight and prudence, then you are instructed that the fact, if you find it is a fact, that the openings in the embankment as they existed on June 7, 1929, were not large enough to properly carry off the water in Beaver Creek on that date, would not render the defendant liable for damages resulting from such impounded water.”

“If you believe from the evidence that the property of plaintiff would have been flooded to some extent and partially damaged by the flood waters of Beaver Creek on June 7, 1929, even if no railway embankment or bridges had existed there at all on that date, then the burden of proof is upon the plaintiff to prove the amount of damages, if any, sustained by flood water, if any, in excess of the water that would have gotten into their premises had there been no railway embankment and bridges.

And if the evidence is such that you are not able to reasonably determine therefrom what damage, if any, the plaintiff sustained by reason of water, if any, in excess of what you believe would

thru which water flows for substantial periods of each year.

In constructing a railway bridge, the law does not require that the full width of such channel be left open but only that the water course be restored to its original state of usefulness, as near as may be. The phrase "as near as may be", as used in this law, does not mean "as near as might be possible". It contemplates some variation from the original condition of the stream and allows some discretion in the engineers of the railway company in constructing a bridge to make such reasonable changes in the flow of the water therein as they find necessary in constructing a safe and practical bridge over the stream.

Even if you find from the evidence that the channel was somewhat narrowed by the bridge, as constructed in 1896 and raised in 1898, but also find that the channel was then, or thereafter, straightened and deepened, so that it still carried off all the water which could have been reasonably anticipated by the exercise of ordinary foresight and prudence, including the ordinary flood waters, without any more interference with the flow thereof, than was reasonably consistent with the right granted the railway company to construct a safe and practical bridge over such stream, then you are instructed that there was no unlawful interference with the water course or channel of the stream by the defendant, and that it cannot be held guilty of negligence in the construction and maintenance

of such bridge over the stream as it existed prior to June 7th, 1929.” [631]

“If you find that the openings in said embankment were large enough to handle, in a reasonable manner, the flood waters of Beaver Creek, prior to June 7, 1929, and that they did not impair the usefulness of the stream to a greater extent than was reasonably necessary in order to construct a safe and practical bridge, and further find that the flood on June 7, 1929 was an unusual, excessive and extraordinary flood, which could not have been reasonably anticipated by the exercise of ordinary foresight and prudence, then you are instructed that the fact, if you find it is a fact, that the openings in the embankment as they existed on June 7, 1929, were not large enough to properly carry off the water in Beaver Creek on that date, would not render the defendant liable for damages resulting from such impounded water.”

“If you believe from the evidence that the property of plaintiff would have been flooded to some extent and partially damaged by the flood waters of Beaver Creek on June 7, 1929, even if no railway embankment or bridges had existed there at all on that date, then the burden of proof is upon the plaintiff to prove the amount of damages, if any, sustained by flood water, if any, in excess of the water that would have gotten into their premises had there been no railway embankment and bridges.

And if the evidence is such that you are not able to reasonably determine therefrom what damage, if any, the plaintiff sustained by reason of water, if any, in excess of what you believe would

have gotten into their property had there been no railway embankment and bridges at all, then you are instructed that plaintiff has failed to prove such damages and your verdict should be for the defendant.”

This petition for a new trial is made and based upon the pleadings and papers on file, and upon the minutes of the Court in said cause, including the testimony taken, instructions given and proceedings had at the trial, which proceedings will be embodied in a bill of exceptions to be settled and filed herein.

FREDERICK D. McCARTHY
JOHNSTON, COLEMAN & JAMESON
GUNN, RASCH & HALL

Attorneys for Defendant.

Due personal service of within Petition for New Trial made and admitted and receipt of copy acknowledged this 10th day of May 1934.

T. C. COLTON
LOWNDES MAURY

Attorneys for Plaintiff.

[Endorsed]: Filed May 14, 1934. [632]

Thereafter, on February 18, 1935, Order denying Motion for New Trial was duly entered herein, in the words and figures following, to-wit: [633]

[Title of Court and Cause.]

ORDER.

The petition for a new trial in the above entitled cause came on regularly for hearing, and

the court having considered the said petition and arguments of counsel for the respective parties, and being duly advised, and good cause appearing therefor, it is ordered that the said petition for a new trial be, and the same is, hereby denied.

CHARLES N. PRAY

Judge.

Dated Feb 18 1935

[Endorsed]: Filed Feb 18 1935. [634]

Thereafter, on March 13, 1935, Bill of Exceptions No. 2, on the Order denying Motion for New Trial, was duly signed, settled, allowed and filed herein, being in the words and figures following, to-wit: [635]

[Title of Court and Cause.]

BILL OF EXCEPTIONS NO. 2

BE IT REMEMBERED that on April 14, 1934, judgment was duly made and entered in accordance with the verdict rendered in the above-entitled cause and that thereafter, and on the 14th day of May, 1934, the defendant made and filed in said Court its petition for a new trial of said cause, together with its assignment of errors, which said petition for new trial and assignment of errors, omitting the title of court and cause, is in words following:

“PETITION FOR NEW TRIAL.

Now comes the defendant, by its counsel, and petitions the Court to set aside the verdict heretofore rendered herein and to grant defendant a new trial in this cause and for grounds of said petition presents and shows to the Court the following, to-wit:

I.

Insufficiency of the evidence to justify the verdict.

In this connection, your petitioner sets forth the following particulars wherein the evidence is claimed to be insufficient to sustain the verdict.

Plaintiff's action is based upon the allegation that the defendant constructed a railway embankment across the Beaver Creek valley and negligently failed to construct and maintain a bridge over the channel of Beaver [636] Creek or openings in said embankment sufficient to permit the free flow of water “in ordinarily seasonally recurring high water” (paragraph 4 of complaint). The defendant denied all the allegations of negligence and alleged that the damage to plaintiff's property was due to an unusual, extraordinary and unprecedented flood which the defendant could not have reasonably anticipated. (Paragraph 6 of answer).

(a) Upon the issues thus raised, the evidence is insufficient to establish or prove that the bridge over said creek was not sufficient to properly handle all ordinary recurring high water flowing in said stream prior to June 7, 1929, without causing any

damage to plaintiff's property or to the property that was occupied by plaintiff on June 7, 1929. On the contrary, the evidence shows that the permanent bridge, as constructed in 1896 and raised five feet in 1898, and which remained there until June 7, 1929, did at all times handle all flood waters without causing any damage to the plaintiff's property or to the property that was occupied by him on June 7, 1929.

(b) The evidence is insufficient to prove that the defendant knew, or should have known, that a flood like that of June 7, 1929, might come down said stream and valley.

(c) The evidence is insufficient to prove that the defendant did not employ competent civil engineers of recognized ability to plan and construct the bridge over said stream, or that it was not constructed in accordance with the plans and specifications of such engineers. On the contrary, the evidence shows that the defendant did employ competent and skillful engineers and that the bridge was constructed in accordance with their plans.

(d) The evidence is insufficient to prove that the flood of June 7, 1929 was only an ordinary high water that might reasonably have been expected by the defendant. On the contrary, the evidence conclusively shows that the flood of June 7, 1929 was an unusual, extraordinary and unprecedented flood, which could not have been reasonably expected or anticipated by the defendant [637]

(e) The evidence is insufficient to prove that there was any negligence in the plan, construction

or maintenance of the bridges over Beaver Creek as they existed from 1881 up to June 7, 1929.

(f) The evidence shows that the property of plaintiff would have been flooded to some extent had there been no railroad embankment across the valley and bridge over Beaver Creek, and the evidence is insufficient to prove what additional damages, if any, plaintiff sustained by reason of the existence of such embankment and bridge.

(g) The evidence is insufficient to prove that the flood water of June 7, 1929 would not have overflowed the bank of the stream and caused the damage to the property of plaintiff before such water reached the railroad embankment and bridge over said creek.

(h) The evidence is insufficient to prove that the defendant, in constructing said bridge, did not restore the stream to its former state of usefulness, as near as may be, compatible with the construction of a safe and practical bridge for railroad operations.

(i) The evidence is insufficient to prove that the opening in the bridge over Beaver Creek, as it existed prior to June 7, 1929, was narrower than the channel of said stream at low water.

(j) The evidence is insufficient to prove any actionable negligence on the part of the defendant against the plaintiff.

(k) The evidence is insufficient to prove any of the acts of negligence charged in the complaint against the defendant.

II.

Errors in law occurring at the trial, which are as follows, to-wit:

(a) The Court erred in over-ruling defendant's objections to the following questions propounded the witness O'Keefe:

"Q. Do you recall any incidents of people being rescued in the Davis Addition, in 1921?

A. Yes, sir.

Q. Who were some of those people and where were the houses? Point them out.

A. My sister was taken from the house where I live now, in 1921.

Mr. McCARTHY: I object to this line of testimony as incompetent, irrelevant and immaterial to any issue in this case. It appears now from the exhibit in evidence, that the water, in 1921, that got in the Davis Addition would necessarily come from the sidehills and the draws. The witness has told us that the water [638] didn't get up in the town from the creek; therefore, it would have no question on the adequacy of the railroad bridge or not; it has nothing to do with the case.

Mr. MAURY: The range or the locality is the test. In that locality, it may be gone into to show notice,—35 miles in any direction——

Mr. McCARTHY: The witness says the water of 1921 didn't get up in 1921 and do any damage. It is possible that it got up in the Davis Addition. What bearing could it have on the——

The COURT: You gentlemen ought to know. You have been through this enough. It may have

some bearing on it, and I will overrule the objection. Let it be shown briefly. I don't think we need to go into all the houses.

Mr. McCARTHY: Exception." (R.——)

(b) The Court erred in overruling defendant's objections to the following question propounded the witness Drake:

"Q. Do you recall further up the track about 3000 or 4000 feet to the east, what happened in 1921?

Mr. McCARTHY: Objected to as incompetent, irrelevant and immaterial,—outside of the drainage area of Beaver Creek—and not material to any issue in this case.

The COURT: I think I will overrule the objection.

Mr. McCARTHY: Exception.

Q. What, if anything, happened to the railway track about 3000 feet to the east of the depot?

Mr. McCARTHY: In order to save time, may we have the same objection, and the ruling, and exception?

Mr. MAURY: Yes; yes.

The COURT: Yes." (R.——)

(c) The Court erred in overruling defendant's objections to the following question propounded the witness Barclay:

"Q. Now, from there on east to your ranch house, what happened in 1921 to that railroad?

Mr. McCARTHY: Objected to as being immaterial, if the Court please, not having any bearing on Beaver Creek, or the bridge over Beaver Creek, as to what happened six miles east.

Mr. MAURY: We intend to show the intensity of the flood.

The COURT: I think so; overrule the objection.

Mr. McCARTHY: Exception." (R.——)

(d) The Court erred in overruling defendant's objections to the following question propounded the witness Lyman:

"Q. How does that correspond with the area for water to go through the old railroad bridge that existed there on June 7, 1929?

Mr. McCARTHY: That is objected to, if the Court please. If he wants to compare the area under the County bridge with the area under the railroad bridge, there is no objection. Now, he proposes to go outside of the County bridge, and taking in the possibility of an overflow and compare the possible overflow of the area of the County bridge with the area of the railroad bridge. If you will compare the area under the county bridge with the area under the railroad [639] bridge, there is no objection. This is not a proper comparison.

The COURT: I don't know if that is his object altogether.

Mr. MAURY: No, sir; it is to show the provision that others made for water there.

The COURT: On account of the height of the roadway you mean, and the height of the bridge?

Mr. MAURY: Yes, sir,—the proof that in high water, the water flowed around the County bridge over that area.

The COURT: I will overrule the objection. You may show it.

Mr. McCARTHY: Note an exception."

(e) The Court erred in sustaining plaintiff's objection to the certified copy from the War Department of the Army Engineers report on the Beaver Creek situation, Defendant's Exhibit D-12, offered in connection with the cross-examination of the witness Lyman: (R.——).

(f) The Court erred in sustaining plaintiff's objection to the certified copy from the War Department of the Army Engineers report on Beaver Creek conditions, Defendant's Exhibit D-12, when offered on direct examination of Defendant's witness Lillis (R.——).

(g) The Court erred in overruling defendant's objection to the following question propounded to plaintiff's witness Lyman on rebuttal:

"Q. Mr. Lyman, having heard all of the testimony of the defendant's witnesses here as to the bridge, what is your opinion as to whether any water would have gotten into the building shown to have been occupied by Nick Wagner on June 6 and 7, 1929, if there had been a bridge with openings 115 feet at Beaver Creek by the Northern Pacific Railway?

Mr. HALL: We object to that question as asking this witness to determine a question that was submitted to the jury, and improper examination on a question of issue that should be submitted to the jury.

The COURT: Oh, yes, your experts have testified to the adequacy of the opening. Overrule the objection. Let him answer the question, if he can.

(Question repeated):

A. I believe there would have been very little, if any.

Q. By “very little”, how much? A. I am very doubtful whether there would have been any. I wouldn’t say whether it would have hit the floor of that building, perhaps.” (R.——).

(h) The Court erred in overruling defendant’s motion at the close of all the evidence for an order directing the jury to return a verdict in favor of the defendant (R.——).

(i) The Court erred in giving the following instruction to the jury, to the giving of which the defendant duly excepted, to-wit:

“If you find from a preponderance of the evidence that Wagner suffered damage in the flood of June 7, 1929, at Wibaux, and that there were two causes which combined to produce the damage, [640] and that both of said causes were proximate causes, as defined elsewhere in the charge of the Court; and that one of such causes was one or more of the culpable negligent acts of the railway company set out in the complaint, and that the other of said causes was an act of God, then by your verdict, you should hold the railway company liable for the loss resulting from both such concurring causes, provided you should further find that the loss would not have been sustained by Wagner

but for some culpable negligent act of the railway, alleged in the complaint.”

III.

The verdict is contrary to the law as given to the jury and particularly in the following portions of the Court's instructions, to-wit:

“If you believe from the evidence that the Railway Company, in raising the embankment of its railroad grade and constructing its bridge across Beaver Creek in 1898, employed civil engineers of at least ordinary skill and ability, and that it constructed, and thereafter maintained, the embankment and openings in question in accordance with the usage of ordinarily prudent and careful engineers under like circumstances, and so as to reasonably handle and care for such ordinary recurring floods or rises in Beaver Creek as were then known and as could be reasonably anticipated by the exercise of ordinary foresight and prudence, and that said openings did handle, in a reasonable manner, all flood waters prior to June 7, 1929, and that the flood of June 7, 1929 was an unusual, excessive and extraordinary flood, which could not have been reasonably anticipated, then the defendant was not guilty of negligence; but the damage to plaintiff was the result of such extraordinary flood or act of God and your verdict should be for the defendant.”

“A water course or stream is the channel cut by running water with well defined banks and bottom thru which water flows for substantial periods of each year.

In constructing a railway bridge, the law does not require that the full width of such channel be left open but only that the water course be restored to its original state of usefulness, as near as may be. The phrase "as near as may be", as used in this law, does not mean "as near as might be possible". It contemplates some variation from the original condition of the stream and allows some discretion in the engineers of the railway company in constructing a bridge to make such reasonable changes in the flow of the water therein as they find necessary in constructing a safe and practical bridge over the stream.

Even if you find from the evidence that the channel was somewhat narrowed by the bridge, as constructed in 1896 and raised in 1898, but also find that the channel was then, or thereafter, straightened and deepened, so that it still carried off all the water which could have been reasonably anticipated by the exercise of ordinary foresight and prudence, including the ordinary flood waters, without any more interference with the flow thereof, than was reasonably consistent with the right granted the railway company to construct a safe and practical bridge over such stream, then you are instructed that there was no unlawful interference with the water course or channel of the stream by the defendant, and that it cannot be held guilty of negligence in the construction and maintenance of such bridge over the stream as it existed prior to June 7th, 1929."

“If you find that the openings in said embankment were large enough to handle, in a reasonable manner, the flood waters of Beaver Creek, prior to June 7, 1929, and that they did not impair [641] the usefulness of the stream to a greater extent than was reasonably necessary in order to construct a safe and practical bridge, and further find that the flood on June 7, 1929 was an unusual, excessive and extraordinary flood, which could not have been reasonably anticipated by the exercise of ordinary foresight and prudence, then you are instructed that the fact, if you find it is a fact, that the openings in the embankment as they existed on June 7, 1929, were not large enough to properly carry off the water in Beaver Creek on that date, would not render the defendant liable for damages resulting from such impounded water.”

“If you believe from the evidence that the property of plaintiff would have been flooded to some extent and partially damaged by the flood waters of Beaver Creek on June 7, 1929, even if no railway embankment or bridges had existed there at all on that date, then the burden of proof is upon the plaintiff to prove the amount of damages, if any, sustained by flood water, if any, in excess of the water that would have gotten into their premises had there been no railway embankment and bridges.

And if the evidence is such that you are not able to reasonably determine therefrom what damage, if any, the plaintiff sustained by reason of water, if any, in excess of what you believe would have gotten into their property had there been no

railway embankment and bridges at all, then you are instructed that plaintiff has failed to prove such damages and your verdict should be for the defendant.”

This petition for a new trial is made and based upon the pleadings and papers on file, and upon the minutes of the Court in said cause, including the testimony taken, instructions given and proceedings had at the trial, which proceedings will be embodied in a bill of exceptions to be settled and filed herein.

FREDERIC D. McCARTHY
JOHNSTON, COLEMAN & JAMESON
GUNN, RASCH & HALL

Attorneys for Defendant.

[Endorsed]: Filed May 14, 1934.”

BE IT FURTHER REMEMBERED that thereafter said petition for a new trial was regularly submitted to said Court on August 4th, 1934, for its decision and determination and thereafter, and on the 18th day of February, 1935, the Court made and entered its order denying said petition, which order, omitting title of court and cause, reads as follows: [642]

“ORDER

The petition for a new trial in the above entitled cause came on regularly for hearing, and the court having considered the said petition and arguments of counsel for the respective parties, and being duly advised, and good cause appearing therefor,

it is ordered that the said petition for a new trial be, and the same is, hereby denied.

CHARLES N. PRAY

Judge.

Dated Feb. 18, 1935.”

And now comes the defendant, and within ten (10) days after the making and entering of said order denying defendant’s petition for a new trial, and submits this, its proposed bill of exceptions and asks that the same be signed, settled and allowed as a true and correct bill of exceptions herein.

Dated this 25th day of February, 1935.

FREDERIC D. McCARTHY

JOHNSTON, COLEMAN & JAMESON

GUNN, RASCH & HALL

Attorneys for Defendant.

State of Montana

County of Lewis and Clark—ss.

E. M. HALL, being first duly sworn, says: That he is one of the attorneys for the defendant in the above-entitled cause; that the attorneys for said defendant reside and have their offices in Helena, Montana, and St. Paul, Minnesota; that Thomas C. Colton, one of the attorneys of record for the plaintiff in said action, resides and has his office in the town of Wibaux, Montana, and H. L. Maury, the other attorney of record for the plaintiff in said action, resides and has his office in the city of Butte, Montana; that between the town of Wibaux and the city of Helena, there is a regular communication by mail; that affiant served the foregoing pro-

posed bill of exceptions upon said Thomas C. Colton, one of the attorneys of record for plaintiff, by depositing a letter containing a copy thereof in the Post Office at Helena, Montana, on February 25, 1935, [643] addressed to said Thomas C. Colton, Attorney at Law, Wibaux, Montana, with the necessary postage thereon to carry said letter prepaid.

E. M. HALL

Subscribed and sworn to before me this 25th day of February, 1935.

[Notarial Seal] A. A. MAJOR

Notary Public for the State of Montana
Residing at Helena, Montana.

My commission expires Feb. 28th, 1937. [644]

CERTIFICATE.

The undersigned Judge, who tried the above entitled action, hereby certifies that the above and foregoing is a full, true and correct bill of exceptions in said action and contains all of the evidence introduced, proceedings had, and the exceptions taken in the trial of said action to the extent therein set forth; and,

IT IS ORDERED, and this does order that the above and foregoing be approved, allowed and settled as a true and correct bill of exceptions herein, within the judgment term or as extended.

Dated this 13th day of March, A. D. 1935.

CHARLES N. PRAY

Judge.

[Endorsed]: Filed March 13, 1935. [645]

Thereafter, on April 25, 1935, Application for an Order reviving and continuing the case in the name of Olivia Wagner, as Administratrix, etc., was duly filed herein, in the words and figures following, to-wit: [646]

[Title of Court and Cause.]

APPLICATION FOR AN ORDER REVIVING
AND CONTINUING THE ABOVE CASE
IN THE NAME OF LEGAL REPRESENTATIVE OF PLAINTIFF.

Comes now the defendant in the above-entitled action, by and through E. M. Hall, one of its Division Counsel for the State of Montana, and applies to the Court for an order reviving and continuing the above-entitled action by and in the name of Olivia Wagner, as Administratrix with the Will annexed of the estate of Nick Wagner, deceased.

This ex parte application is based upon Rule 94 of the Rules of this Court, the affidavit of E. M. Hall hereto attached, and the attached copy of letters of administration, with the Will annexed, issued to Olivia Wagner on April 20th, 1935.

NORTHERN PACIFIC RAILWAY
COMPANY,

By E. M. HALL

One of its Division Counsel. [647]

[Title of Court and Cause.]

AFFIDAVIT.

State of Montana

County of Lewis and Clark—ss.

E. M. HALL, being first duly sworn, says: That he is one of the attorneys for the defendant in the above-entitled action, and one of its Division Counsel for the State of Montana; that the above action was tried before a jury, which rendered a verdict in favor of the plaintiff; that a petition for a new trial was made by the defendant and submitted to the Court on August 4, 1934; that said petition was denied by the Court on February 18, 1935; that the defendant desires to appeal from the judgment and from the order denying defendant's motion for a new trial.

That Nick Wagner, the plaintiff in said action, died on January 13, 1935, and letters of administration, with the Will annexed, were duly issued to his daughter, Olivia Wagner, on April 20, 1935, and an attested copy of such letters is attached to and made a part of this affidavit.

E. M. HALL

Subscribed and sworn to before me this 23rd day of April, 1935.

[Notarial Seal]

A. A. MAJOR

Notary Public for the State of Montana

Residing at Helena, Montana

My commission expires Feb. 28, 1937. [648]

In the District Court of the Seventh Judicial District of the State of Montana, in and for the County of Wibaux.

In the Matter of the Estate of Nick Wagner,
Deceased.

LETTERS OF ADMINISTRATION WITH
THE WILL ANNEXED.

State of Montana,
County of Wibaux.—ss.

The last will and testament of Nick Wagner, deceased, a copy of which is hereto annexed, having been proved and recorded in the District Court of Wibaux County, Montana; and Catherine Wagner, the Executrix named therein having requested the appointment of her daughter, Olivia Wagner, of Wibaux, Montana, as Administratrix with the Will annexed herein, the said Olivia Wagner is hereby appointed Administratrix with the Will annexed in the above matter.

Witness, Hazel Carlock-Young, Clerk of the District Court of the County of Wibaux, Montana, with the seal of the Court affixed, this 20th day of April, A. D., 1935.

[Court Seal] HAZEL CARLOCK-YOUNG
Clerk of the District Court.

State of Montana,
County of Wibaux.—ss.

I, Olivia Wagner, do solemnly swear that I will support the Constitution of the United States and

the Constitution of the State of Montana, and that I will faithfully perform, according to law, the duties of Administratrix with the Will annexed in the matter of the Estate of Nick Wagner, deceased.

OLIVIA WAGNER

Subscribed and sworn to before me this 20th day of April, A. D. 1935.

[Notarial Seal] THOMAS C. COLTON

Notary Public for the State of Montana.

Residing at Wibaux, Montana.

My commission expires December 30, 1936.

Attested a true copy.

HAZEL CARLOCK-YOUNG

Clerk of the District Court. [649]

IN THE NAME OF GOD, AMEN:

I, Nick Wagner, of the Town of Wibaux, Wibaux County, Montana, being of lawful age and of sound and disposing mind and memory, do hereby make, publish and declare this my last will and testament.

1. It is my will and I do hereby direct that my Executrix, hereinafter named shall pay my funeral expenses and all my just debts as soon as may be convenient after my death.

2. I give and bequeath to my grandson, Norbit Fadden the sum of \$1000.00.

3. All of the rest, residue and remainder of my Estate, of every kind, nature and description, both

real personal and mixed and wheresoever the same may be situated, of which I may die seized, or possessed or to which I may be entitled at the time of my decease, I give, bequeath, and devise as follows, to-wit:

(a) To my beloved wife Kathrine Wagner all of said property during her lifetime with the absolute right to use such portion or portions of said property as may be necessary for the support and maintenance and clothing of my said wife Kathrine Wagner. It is my will that my wife Kathrine Wagner shall not use any of said property for any other purpose other than heretofore mentioned in this paragraph.

(b) That upon the death of my beloved wife Kathrine Wagner, it is my will that all of the rest, residue and remainder of my property be divided share and share alike between my three children, Nick Wagner, *Mrs.* Rose Fadden and Olivia Wagner.

4. It is my will that as soon as possible after my death, all of my property be sold and converted into cash, which my Executrix, hereinafter named shall place or cause to be placed in a sound financial depository, and that my wife Kathrine Wagner shall have the right to use such amounts of said cash or money as is necessary only for her support, clothing and maintenance, as aforesaid.

5. I hereby nominate and appoint my wife Kathrine Wagner to be the Executrix of this my last will and testament, and hereby request that

she be not required to furnish any bond for the faithful performance of her duties, as such Executrix, with full power and authority to sell, any or all of the property of which I may die seized, without any order of the Court.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 4th day of May, 1929, in the presence of the undersigned witnesses, who subscribed their names hereto at my request and in my presence, and in the presence of each other.

NICK WAGNER

The foregoing instrument set forth above on this page upon which this certificate is written, was at the date hereof, to-wit June 4, 1929, subscribed in our presence by Nick Wagner, who at the same time declared the same to be his last will and testament, and at his request and in his presence, and in the presence of each other, we at the same time and place signed our names as witnesses thereto.

GEO. E. KELLER, M. D.

Address: Wibaux, Montana.

F. A. LOSINSKI

Address: Wibaux, Montana.

[Endorsed]: Filed April 25, 1935. [650]

Thereafter, on May 1, 1935, Order Reviving case in the name of Olivia Wagner, as Administratrix, etc., was duly filed and entered herein, in the words and figures following, to-wit: [651]

[Title of Court and Cause.]

ORDER.

On reading the ex parte application of the defendant, by and through E. M. Hall, one of its Division Counsel, supported by the affidavit of E. M. Hall showing the death of plaintiff, Nick Wagner, and by an attested copy of the letters of administration, with the Will annexed, issued to Olivia Wagner, as Administratrix of the Estate of Nick Wagner, deceased;

IT IS HEREBY ORDERED that said action be revived and continued in the name of Olivia Wagner, as Administrative with the Will Annexed of the estate of Nick Wagner, deceased, and that said Administratrix be and she is hereby substituted as plaintiff in the place and stead of said Nick Wagner, deceased, and that such revivor and continuance be without prejudice to any of the proceedings already had in said action.

Dated this 26th day of April, 1935.

CHARLES N. PRAY

Judge. [652]

State of Montana

County of Lewis and Clark—ss.

E. M. HALL, being duly sworn, says: That he is one of the attorneys for the defendant in the order of the Court hereto attached; that the plaintiff, Nick Wagner, at the time of his death, resided in Wibaux, Montana; that his attorneys of record in the case of Nick Wagner v. Northern Pacific Railway Company, were Thomas C. Colton, of Wibaux, Montana, and H. L. Maury, of Butte, Montana; that Olivia Wagner, as Administratrix with the Will annexed of the Estate of Nick Wagner, Deceased, who, by the attached order, was substituted as plaintiff in said action, also resides at Wibaux, Montana; that the attorneys for the defendant reside at Helena, Montana, Billings, Montana, and St. Paul, Minnesota; that between Helena, Montana, and Wibaux, Montana, there is a regular communication by mail; that affiant served a certified copy of the attached order upon Thomas C. Colton, one of the attorneys of record for Nick Wagner, and also served a certified copy of said order upon Olivia Wagner, as Administratrix with the Will annexed of the estate of Nick Wagner, Deceased, by depositing a letter addressed to each of said persons, containing a certified copy of said order, in the Post Office at Helena, Montana, on April 29, 1935, one of said letters being addressed to Thomas C. Colton, Attorney at Law, Wibaux, Montana, and the other of said letters being ad-

dressed to Olivia Wagner, as Administratrix of the Estate of Nick Wagner, Deceased, at Wibaux, Montana, with the necessary postage on each of said letters to carry the same prepaid.

E. M. HALL

Subscribed and sworn to before me this 29th day of April, 1935.

[Notarial Seal]

A. A. MAJOR

Notary Public for the State of Montana
Residing at Helena, Montana

My commission expires February 28, 1937.

[Endorsed]: Filed May 1, 1935. [653]

Thereafter, on May 3, 1935, Assignment of Errors was duly filed herein, in the words and figures following, to-wit: [654]

[Title of Court and Cause.]

ASSIGNMENT OF ERRORS.

Comes now the defendant, in the above-entitled cause, and makes and files the following assignment of errors upon which it will rely upon its prosecution of the appeal from the judgment and from the order denying its petition for a new trial in said cause, to-wit:

I.

Errors in law occurring at the trial, which are as follows, to-wit:

(a) The Court erred in over-ruling defendant's objections to the following questions propounded the witness O'Keefe:

"Q. Do you recall any incidents of people being rescued in the Davis Addition, in 1921?

A. Yes, sir.

Q. Who were some of those people and where were the houses? Point them out.

A. My sister was taken from the house where I live now, in 1921.

Mr. McCARTHY: I object to this line of testimony as incompetent, irrelevant and immaterial to any issue in this case. It appears now from the exhibit in evidence, that the water, in 1921, that got in the Davis Addition would necessarily come from the sidehills and the draws. The witness has told us that the water didn't get up in the town from the creek; therefore, it would have no question on the adequacy of the railroad bridge or not; it has nothing to do with the case.

Mr. MAURY: The range or the locality is the test. In that locality, it may be gone into to show notice,—35 miles in any direction— [655]

Mr. McCARTHY: The witness says the water of 1921 didn't get up in 1921 and do any damage. It is possible that it got up in the Davis Addition. What bearing could it have on the——

The COURT: You gentlemen ought to know. You have been through this enough. It may have

some bearing on it, and I will overrule the objection. Let it be shown briefly. I don't think we need to go into all the houses.

Mr. McCARTHY: Exception." (R.——)

(b) The Court erred in overruling defendant's objections to the following question propounded the witness Drake:

"Q. Do you recall further up the track about 3000 or 4000 feet to the east, what happened in 1921?

Mr. McCARTHY: Objected to as incompetent, irrelevant and immaterial,—outside of the drainage area of Beaver Creek—and not material to any issue in this case.

The COURT: I think I will overrule the objection.

Mr. McCARTHY: Exception.

Q. What, if anything, happened to the railway track about 3000 feet to the east of the depot?

Mr. McCARTHY: In order to save time, may we have the same objection, and the ruling, and exception?

Mr. MAURY: Yes; yes.

The COURT: Yes." (R.——)

(c) The Court erred in overruling defendant's objection to the following question propounded the witness Barclay:

"Q. Now, from there on east to your ranch house, what happened in 1921 to that railroad?

Mr. McCARTHY: Objected to as being immaterial, if the Court please, not having any bearing on Beaver Creek, or the bridge over Beaver Creek, as to what happened six miles east.

Mr. MAURY: We intend to show the intensity of the flood.

The COURT: I think so; overrule the objection.

Mr. McCARTHY: Exception." (R.——)

(d) The Court erred in overruling defendant's objection to the following question propounded the witness Lyman:

"Q. How does that correspond with the area for water to go through the old railroad bridge that existed there on June 7, 1929?

Mr. McCARTHY: That is objected to, if the Court please. If he wants to compare the area under the County bridge with the area under the railroad bridge, there is no objection. Now, he proposes to go outside of the County bridge, and taking in the possibility of an overflow and compare the possible overflow of the area of the County bridge with the area of the railroad bridge. If you will compare the area under the county bridge with the area under the railroad bridge, there is no objection. This is not a proper comparison. [656]

The COURT: I don't know if that is his object altogether.

Mr. MAURY: No, sir; it is to show the provision that others made for water there.

The COURT: On account of the height of the roadway you mean, and the height of the bridge?

Mr. MAURY: Yes, sir,—the proof that in high water, the water flowed around the County bridge over that area.

The COURT: I will overrule the objection. You may show it.

Mr. McCARTHY: Note an exception."

(e) The Court erred in sustaining plaintiff's objection to the certified copy from the War Department of the Army Engineers report on the Beaver Creek situation, Defendant's Exhibit D-12, offered in connection with the cross-examination of the witness Lyman: (R.———).

(f) The Court erred in sustaining plaintiff's objection to the certified copy from the War Department of the Army Engineers report on Beaver Creek conditions, Defendant's Exhibit D-12, when offered on direct examination of Defendant's witness Lillis (R.———).

(g) The Court erred in overruling defendant's motion at the close of all the evidence for an order directing the jury to return a verdict in favor of the defendant (R.———).

(h) The Court erred in giving the following instruction to the jury, to the giving of which the defendant duly excepted, to-wit:

"If you find from a preponderance of the evidence that Wagner suffered damage in the flood of June 7, 1929, at Wibaux, and that there were two causes which combined to produce the damage, and that both of said causes were proximate causes, as defined elsewhere in the charge of the Court; and that one of such causes was one or more of the cul-

pable negligent acts of the railway company set out in the complaint, and that the other of said causes was an act of God, then by your verdict, you should hold the railway company liable for the loss resulting from both such concurring causes, provided you should further find that the loss would not have been sustained by Wagner but for some culpable negligent act of the railway, alleged in the complaint."

II.

The verdict is contrary to the law as given to the jury and particularly in the following portions of the Court's instructions, to-wit: [657]

(a) "If you believe from the evidence that the Railway Company, in raising the embankment of its railroad grade and constructing its bridge across Beaver Creek in 1898, employed civil engineers of at least ordinary skill and ability, and that it constructed, and thereafter maintained, the embankment and openings in question in accordance with the usage of ordinarily prudent and careful engineers under like circumstances, and so as to reasonably handle and care for such ordinary recurring floods or rises in Beaver Creek as were then known and as could be reasonably anticipated by the exercise of ordinary foresight and prudence, and that said openings did handle, in a reasonable manner, all flood waters prior to June 7, 1929, and that the flood of June 7, 1929 was an unusual, excessive and extraordinary flood, which could not

have been reasonably anticipated, then the defendant was not guilty of negligence; but the damage to plaintiff was the result of such extraordinary flood or act of God and your verdict should be for the defendant.”

(b) “A water course or stream is the channel cut by running water with well defined banks and bottom thru which water flows for substantial periods of each year.

In constructing a railway bridge, the law does not require that the full width of such channel be left open but only that the water course be restored to its original state of usefulness, as near as may be. The phrase “as near as may be”, as used in this law, does not mean “as near as might be possible”. It contemplates some variation from the original condition of the stream and allows some discretion in the engineers of the railway company in constructing a bridge to make such reasonable changes in the flow of the water therein as they find necessary in constructing a safe and practical bridge over the stream.

Even if you find from the evidence that the channel was somewhat narrowed by the bridge, as constructed in 1896 and raised in 1898, but also find that the channel was then, or thereafter, straightened and deepened, so that it still carried off all the water which could have been reasonably anticipated by the exercise of ordinary foresight and prudence, including the ordinary flood waters, without any more interference with the flow there-

of, than was reasonably consistent with the right granted the railway company to construct a safe and practical bridge over such stream, then you are instructed that there was no unlawful interference with the water course or channel of the stream by the defendant, and that it cannot be held guilty of negligence in the construction and maintenance of such bridge over the stream as it existed prior to June 7th, 1929.”

(c) “If you find that the openings in said embankment were large enough to handle, in a reasonable manner, the flood waters of Beaver Creek, prior to June 7, 1929, and that they did not impair the usefulness of the stream to a greater extent than was reasonably necessary in order to construct a safe and practical bridge, and further find that the flood on June 7, 1929 was an unusual, excessive and extraordinary flood, which could not have been reasonably anticipated by the exercise of ordinary foresight and prudence, then you are instructed that the fact, if you find it is a fact, that the openings in the embankment as they existed on June 7, 1929, were not large enough to properly carry off the water in Beaver Creek on that date, would not render the defendant liable for damages resulting from such impounded water.” [658]

(d) “If you believe from the evidence that the property of plaintiff would have been flooded to some extent and partially damaged by the flood waters of Beaver Creek on June 7, 1929, even if no railway embankment or bridges had existed there at all on that date, then the burden of proof is upon the

plaintiff to prove the amount of damages, if any, sustained by flood water, if any, in excess of the water that would have gotten into their premises had there been no railway embankment and bridges.

And if the evidence is such that you are not able to reasonably determine therefrom what damage, if any, the plaintiff sustained by reason of water, if any, in excess of what you believe would have gotten into their property had there been no railway embankment and bridges at all, then you are instructed that plaintiff has failed to prove such damages and your verdict should be for the defendant."

(e) The court erred in overruling and denying defendant's petition for a new trial.

(f) The court erred in entering judgment for the plaintiff.

WHEREFORE, the defendant prays that the judgment entered in said action be reversed and that the order denying defendant's petition for a new trial be reversed, and that said action against said defendant be ordered dismissed.

FREDERIC D. McCARTHY

JOHNSTON, COLEMAN & JAMESON

GUNN, RASCH & HALL

Attorneys for Defendant.

[Endorsed]: Filed May 3, 1935. [659]

Thereafter, on May 4, 1935, Petition for Appeal and Order Allowing Appeal were duly filed and entered herein, in the words and figures following, to-wit: [660]

[Title of Court and Cause.]

PETITION FOR APPEAL.

Comes now the defendant above-named, Northern Pacific Railway Company, and feeling itself aggrieved by the verdict of the jury and the judgment entered thereon, for \$5000.00 damages and \$1052.53 costs, in favor of the plaintiff, on the 14th day of April, 1934, and by the denial of its petition for a new trial of said cause on February 18, 1935, does hereby appeal from said judgment and the whole thereof, and from the order denying said petition for new trial, and prays that this appeal may be allowed and that a transcript of the record and of the proceedings and papers upon which said verdict, judgment, and order denying said petition for a new trial were made, rendered and entered, duly authenticated, may be sent to the United States Circuit Court of Appeals, for the Ninth Circuit, and also that an order be made fixing the amount of security which the defendants shall give and furnish upon said appeal and that upon giving of such security, all further proceedings in this Court be suspended and stayed until the determination [661] of said appeal by the United States Circuit Court of Appeals, for the Ninth Circuit.

FREDERIC D. McCARTHY

JOHNSTON, COLEMAN & JAMESON

GUNN, RASCH & HALL

Attorneys for Petitioner.

ALLOWANCE OF APPEAL AND FIXING
BOND.

An assignment of errors having been filed with the foregoing Petition for Appeal, IT IS ORDERED that the appeal of the defendant in the above-entitled action, from the judgment heretofore made, given and made therein, in favor of Nick Wagner, now deceased, and against the defendant, and from the order denying defendant's petition for a new trial, be allowed as prayed for in defendant's petition for appeal filed herein, and that a certified transcript of the record, bills of exceptions, exhibits, stipulations and all proceedings be transmitted to the Circuit Court of Appeals, for the Ninth Circuit of the United States.

IT IS FURTHER ORDERED that a bond on appeal in the penal sum of Seven Thousand Five Hundred (\$7500.00) Dollars, in the form and with sureties approved by the Court, be given for the payment of all damages and costs *of the* defendant, shall fail to make good its appeal; and, that upon the filing of such a bond, with approved sureties, further proceedings in this Court be stayed pending the determination of the appeal in the Circuit Court of Appeals.

Dated this 4th day of May, 1935.

CHARLES N. PRAY

Judge.

[Endorsed]: Filed May 4, 1935. [662]

Thereafter, on May 4, 1935, Bond on Appeal was duly approved and filed herein, in the words and figures following, to-wit: [663]

[Title of Court and Cause.]

BOND ON APPEAL.

KNOW ALL MEN BY THESE PRESENTS, that we, the Northern Pacific Railway Company, a corporation, organized and existing under the laws of the State of Wisconsin, as principal, and St. Paul-Mercury Indemnity Company, a corporation, organized and existing under and by virtue of the laws of Minnesota, and qualified and authorized to do business in Montana, to execute bonds and undertakings, and to act as surety generally within the District and State of Montana, are held and firmly bound unto Olivia Wagner, as Administratrix, with the Will annexed of the estate of Nick Wagner, deceased, the plaintiff above named, in the full sum of Seventy-five Hundred Dollars (\$7500.00), to be paid to the said plaintiff, as such Administratrix, her certain attorneys, successors or assigns, for which payment well and truly to be made, said principal and surety bind themselves, their and each of their successors and assigns, jointly and severally, firmly by these presents.

SEALED AND DATED this 4th day of May, 1935.

WHEREAS, in the District Court of the United States, for the District of Montana, in the above-entitled suit, pending in said Court, [664] between

Olivia Wagner, as Administratrix with the Will annexed of the Estate of Nick Wagner, deceased, plaintiff, and the Northern Pacific Railway Company, a corporation, defendant, a judgment was rendered against said defendant for the sum of Five Thousand (\$5000.00) Dollars, and costs taxed at \$1052.53, which judgment was entered on the 14th day of April, 1934, and said defendant has petitioned for an appeal from said judgment to the Circuit Court of Appeals of the United States, for the Ninth Circuit, and from the order denying its petition for a new trial, and an order has been made allowing said appeal, and said defendant proposes to prosecute said appeal to reverse the said judgment and order denying it a new trial, and to answer all damages and costs if it fails to make its plea good.

NOW, THEREFORE, in consideration of said appeal, the condition of this obligation is such that if the Northern Pacific Railway Company, a corporation, shall prosecute its said appeal to effect and answer all damages and costs, if it fails to make good its plea, then this obligation shall be void, otherwise to remain in full force and effect.

NORTHERN PACIFIC RAILWAY
COMPANY,

By E. M. HALL

One of its Division Counsel for
the State of Montana.

ST. PAUL-MERCURY INDEMNITY COMPANY,

By A. A. MAJOR

Its Attorney-in-Fact.

The foregoing bond, to operate as a supersedeas, is approved this 4th day of May, 1935.

CHARLES N. PRAY

Judge.

[Endorsed]: Filed May 4, 1935. [665]

Thereafter, on May 4, 1935, Citation of Appeal was duly issued herein, which Original Citation was hereto annexed and is in the words and figures following, to-wit: [666]

[Title of Court and Cause.]

CITATION.

United States of America to Olivia Wagner, as Administratrix, with the Will Annexed of the Estate of Nick Wagner, Deceased, Greeting:

YOU ARE HEREBY CITED and admonished to be and appear in the United States *District* Court of Appeals, for the Ninth Circuit, to be held at the City of San Francisco, California, within thirty (30) days from the date hereof, pursuant to an order filed and entered in the office of the Clerk of the District Court of the United States, for the District of Montana, allowing an appeal from a judgment filed and entered in said Court on the 14th day of April, 1934, in favor of Nick Wagner, now deceased, and an order on April 18, 1935 denying defendant's petition for a new trial, being an action at law, No. 566, wherein you have, by

an order of the above-entitled court, dated April 26, 1935, been substituted as plaintiff in place of Nick Wagner, and the Northern Pacific Railway Company is the defendant, to show cause, if any there be, why the judgment rendered against the said defendant, and the order denying its petition for a new trial as in said appeal mentioned, should not be reversed and corrected, and why justice should not be done the parties in that behalf.

Dated this 4th day of May, 1935.

CHARLES N. PRAY

United States Judge for the District of
Montana. [667]

United States Marshal's Office
District of Montana

I hereby certify that I received the within writ on the 6th day of May, 1935, and personally served the same on the 7th day of May, 1935, by delivering to, and leaving with Olivia Wagner, as Administratrix, with the Will annexed, of the estate of Nick Wagner, deceased, the plaintiff named in said citation, personally, and also by delivering to and leaving with Thomas C. Colton, one of the attorneys of record for the plaintiff in said cause, personally, at Wibaux, in the County of Wibaux, State of Montana, a copy of said citation.

SID A. WILLIS

U. S. Marshal.

By E. LIEBERG

Deputy.

Helena, May 8, 1935.

[Endorsed]: Filed May 10, 1935. [668]

Thereafter, on May 10, 1935, Defendant's Prae-
cipe for Transcript on Appeal, was duly filed here-
in, in the words and figures following, to-wit: [670]

[Title of Court and Cause.]

PRAECIPE FOR TRANSCRIPT OF RECORD.

To the Clerk of the Above-Entitled Court:

Please prepare a transcript of the record, for
the purpose of an appeal of said case to the United
States Circuit Court of Appeals, for the Ninth
Circuit, and include therein the following:

1. Plaintiff's complaint;
2. Petition for removal to Federal Court;
3. Notice of Intention of filing Petition for
Removal;
4. Order of Removal;
5. Motion to remand to State Court, with affi-
davits attached;
6. Minute entry of order denying motion to
remand;
7. Answer of Defendant;
8. Reply to Answer;
9. Verdict of Jury;
10. Judgment;
11. Bill of Exceptions of Evidence;
12. Petition for new trial;
13. Order denying motion for new trial;
14. Bill of Exceptions No. 2 on order denying
motion for new trial;
15. Application for order reviving and continu-
ing case in name of Olivia Wagner, etc.

16. Order reviving and continuing case in name of Olivia Wagner, as Administratrix, etc.
17. Defendant's petition for appeal, and order allowing appeal;
18. Assignment of Errors;
19. Bond on Appeal;
20. Citation on appeal;
21. This Praecipe.

FREDERIC D. McCARTHY

JOHNSTON, COLEMAN & JAMESON

GUNN, RASCH & HALL

Attorneys for Appellant and Defendant. [671]

State of Montana

County of Lewis and Clark—ss.

E. M. HALL, being first duly sworn, deposes and says: That he is one of the attorneys for the defendant, Northern Pacific Railway Company, in the above-entitled cause; that the attorneys for said defendant reside and have their offices in St. Paul, Minnesota, Billings, Montana, and Helena, Montana; that Thomas C. Colton and H. L. Maury, the attorneys of record for plaintiff in said action, reside and have their offices in the town of Wibaux, and the City of Butte, Montana, respectively. That between the town of Wibaux, and Helena, Montana, there is a regular communication by mail; that affiant served the foregoing praecipe for transcript of record upon Thomas C. Colton, attorney for plaintiff, by depositing a letter containing a copy thereof in the Post Office at Helena, Mon-

tana, on May 10th, 1935, addressed to said Thomas C. Colton, Attorney at Law, Wibaux, Montana, with the necessary postage thereon to carry said letter prepaid.

E. M. HALL

Subscribed and sworn to before me this 10th day of May, 1935.

[Notarial Seal]

A. A. MAJOR

Notary Public for the State of Montana.

Residing at Helena, Montana

My commission expires Feb. 28th, 1937.

[Endorsed]: Filed May 10, 1935. [672]

Thereafter, on May 17, 1935, Plaintiff's Praecipe for additional Transcript of Record was duly filed herein, in the words and figures following, to-wit:

[Title of Court and Cause.]

PRAECIPE FOR ADDITIONAL TRANSCRIPT
OF RECORD.

To the Clerk of the above entitled Court:

Please add to the praecipe for transcript of the record heretofore given you and served on us, as attorneys for the appellee or plaintiff, the following, and forward them, duly certified, to be used on the appeal, and to become a part of the record on appeal of this cause, to the Circuit Court of Appeals, for the Ninth Circuit, and include in such record every exhibit that was introduced in evi-

dence on the part of the plaintiff or on the part of the defendant, every model, every diagram, every relief map, every document of any kind, used or introduced in evidence; and also copy of this prae-cipe.

Yours very truly,

THOMAS C. COLTON

H. L. MAURY

Attorneys for Plaintiff and

Appellee. [673]

State of Montana

County of Silver Bow—ss.

H. LOWNDES MAURY, being first duly sworn, deposes and says: That he is one of the attorneys for the plaintiff, in the above entitled cause; that the attorneys for the defendant reside and have their offices in the City of St. Paul, Minnesota, Billings, Montana, and Helena, Montana, respectively, said attorneys being Messrs. Frederic D. McCarthy, Johnston, Coleman & Jameson, Gunn, Rasch & Hall; That between the City of Butte and Helena, Montana, there is a regular communication by mail; that affiant served the foregoing prae-cipe for additional transcript of record upon Messrs. Gunn, Rasch & Hall, attorneys for defendant, by depositing a true copy thereof in the Post Office at Butte, Montana, on May 15th, 1935, addressed to said Messrs. Gunn, Rasch & Hall, Attorneys at Law, Helena, Montana, with the necessary postage thereon to carry said letter prepaid.

H. LOWNDES MAURY

Subscribed and sworn to before me this 15th day of May, A. D., 1935.

[Notarial Seal]

RUTH BARRETT

Notary Public for the State of Montana.

Residing at Butte, Montana.

My commission expires Dec. 8th, 1936.

[Endorsed]: Filed May 17, 1935. [674]

CLERK'S CERTIFICATE TO TRANSCRIPT
OF RECORD.

United States of America,
District of Montana—ss.

I, C. R. Garlow, Clerk of the United States District Court for the District of Montana, do hereby certify and return to The Honorable, The United States Circuit Court of Appeals for the Ninth Circuit, that the foregoing 2 volumes, consisting of 674 pages, numbered consecutively from 1 to 674 inclusive, is a full, true and correct transcript of all portions of the record and proceedings in Case No. 566, Olivia Wagner, as Administratrix, etc. vs. Northern Pacific Railway Company, which have by praecipe been designated to be incorporated into said transcript, (save and except the documents and exhibits designated in the appellee's praecipe for additional transcript of record), as appears from the original records and files of said court in my custody as such Clerk; and I do further certify and return that I have annexed to said transcript and included within said pages the original Citation issued in said cause.

I further certify that the costs of said transcript of record amount to the sum of One Hundred Six and 75/100 Dollars (\$106.75), and have been paid by the appellant.

WITNESS my hand and the seal of said court at Helena, Montana, this May 24th, A. D. 1935.

[Seal]

C. R. GARLOW,

Clerk U. S. District Court,
District of Montana. [675]

[Endorsed]: No. 7876. United States Circuit Court of Appeals for the Ninth Circuit. Northern Pacific Railway Company, a Corporation, Appellant, vs. Olivia Wagner, as Administratrix with the Will Annexed of the Estate of Nick Wagner, Deceased, Appellee. Transcript of Record. Upon Appeal from the District Court of the United States for the District of Montana.

Filed May 27, 1935.

PAUL P. O'BRIEN,

Clerk of the United States Circuit Court of Appeals
for the Ninth Circuit.